

**8<sup>th</sup>**

Society of  
Coloproctology  
of Yugoslavia



Founded in 1997



SCHOOL OF MEDICINE  
UNIVERSITY IN BELGRADE



CLINICAL CENTER OF SERBIA

# BIENNIAL INTERNATIONAL SYMPOSIUM OF COLOPROCTOLOGY

**October 11-13, 2012**  
**SAVA CENTER, BELGRADE, SERBIA**

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*Welcome*

to the

8<sup>th</sup> BIANNUAL  
INTERNATIONAL SYMPOSIUM  
OF COLOPROCTOLOGY

October 11 - 13<sup>th</sup>, 2012.

Sava Center, Belgrade  
Serbia



8<sup>th</sup> BIANNUAL INTERNATIONAL  
SYMPOSIUM OF COLOPROCTOLOGY

Under the auspices  
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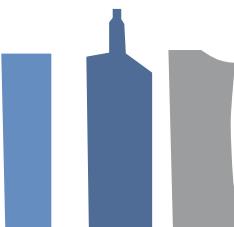


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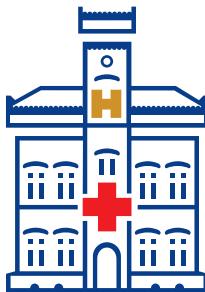
**Society of  
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**Founded in 1997**



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UNIVERSITY IN BELGRADE**



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*Dear Colleagues,*

*I am delighted to invite you on behalf of the Society of Coloproctology of Yugoslavia to our 8<sup>th</sup> biannual International Symposium of Coloproctology in Belgrade.*

*Our symposium is considered to be one of the most important International meetings with worldwide well known experts and over 1000 participants already applied and counting. Our organization fleet is already taking care of all the details both in scientific and in social way. If you had a chance to take a look at or preliminary program, you must have noticed that all the fields of coloproctology have been covered and that there is a variety of topics in every session. Presence of some of the speakers presents a unique opportunity to see them live and discuss some interesting issues from their fields of expertise that for you may be unclear or questionable.*

*Apart from that, Belgrade is a wonderful city with specific culture and historical wealth. We are all looking forward to welcoming you in Belgrade next month!*

*Best wishes,*

A handwritten signature in black ink, appearing to read "Zoran Krivokapić".

*Zoran Krivokapić MD FRCS  
Symposium President*

## Symposium President: Zoran Krivokapić



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L. Matija*

**8<sup>th</sup> BIENNIAL  
INTERNATIONAL SYMPOSIUM  
OF COLOPROCTOLOGY**

**LECTURERS**  
*(in alphabetic order)*

October 11-13<sup>th</sup>, 2012.

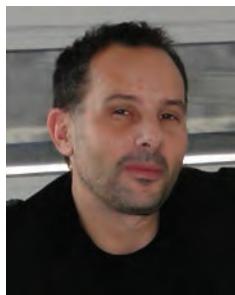
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*Adam Dziki*  
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*Ronan O'Connell  
University College Dublin, UK*



*Santoro Giulio Aniello  
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Treviso, Italy*



*Slavica Ušaj  
Institute of Oncology of Vojvodina, Serbia*



*Steven Wexner  
Cleveland Clinic Florida, USA*



*Tomáš Skřička  
Brno, Czech Republic*



*Yves Panis  
Beaujon Hospital, University Paris VII, France*

## GENERAL INFORMATION

Badges	<i>Delegates are asked to wear name badges at all times in the Congress Center. Legend: Red-Exhibitors, Turquoise-Lecturers, Blue-Participants, Yellow-Congress organisation</i>
Banks	<i>Most banks are opened from 08.00 – 17.00 and closed on Sundays</i>
Belgrade airport	<i>+381 (0) 11 - 209 4000, 209 4444</i>
Catering	<i>Coffee, refreshment drinks and lunch are included in the registration fee. Coffee and refreshment drinks will be served in the exhibition area. Lunch will be served in Congress Center Restaurant</i>
Certificates of attendance	<i>Certificates of attendance are issued at the Registration desk</i>
Language	<i>The official language of the meeting is English. Simultaneous translation in Serbian language will be provided</i>
Messages	<i>Messages for delegates may be left at the Registration Desk in the entrance foyer of the Congress Center during open hours. The notification of messages will be displayed on the message board sited next to the registration area</i>
Shuttle Buses for all participants	<i>12<sup>th</sup> October 2012 Departure at 19<sup>15</sup> h in front of Sava Center (Reception in the honour of participants at The Royal Palace)</i>

Tourist information	<i>If you need more details on tourist information, please contact TCA travel agency at the Registration desk</i>
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Taxi companies	<i>Yellow Taxi - 9802 Halo Taxi - 3564 555 Taxi bel - 9808</i>
Weather	<i>Average daily temperature is 15-23°C</i>

## Congress office:

*Technical secretary of 8<sup>th</sup> Biannual International Symposium of Coloproctology*

Ms Slavojka Noel

## Contacts:

*Tel: +381 (0) 11 362 28 11*

*Fax: +381 (0) 11 362 28 11*

*e-mail: scpy@beotel.rs*

*www.scpy.org.rs*

Congress office address:  
*Society of Coloproctology of Yugoslavia*  
*First Surgical Clinic*  
*St. Koste Todorovića 6*  
*11000 Belgrade*  
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Congress fee:

Participants	
Members of SCPY	100 € *
Others	150 € *
Trainees	50 € *

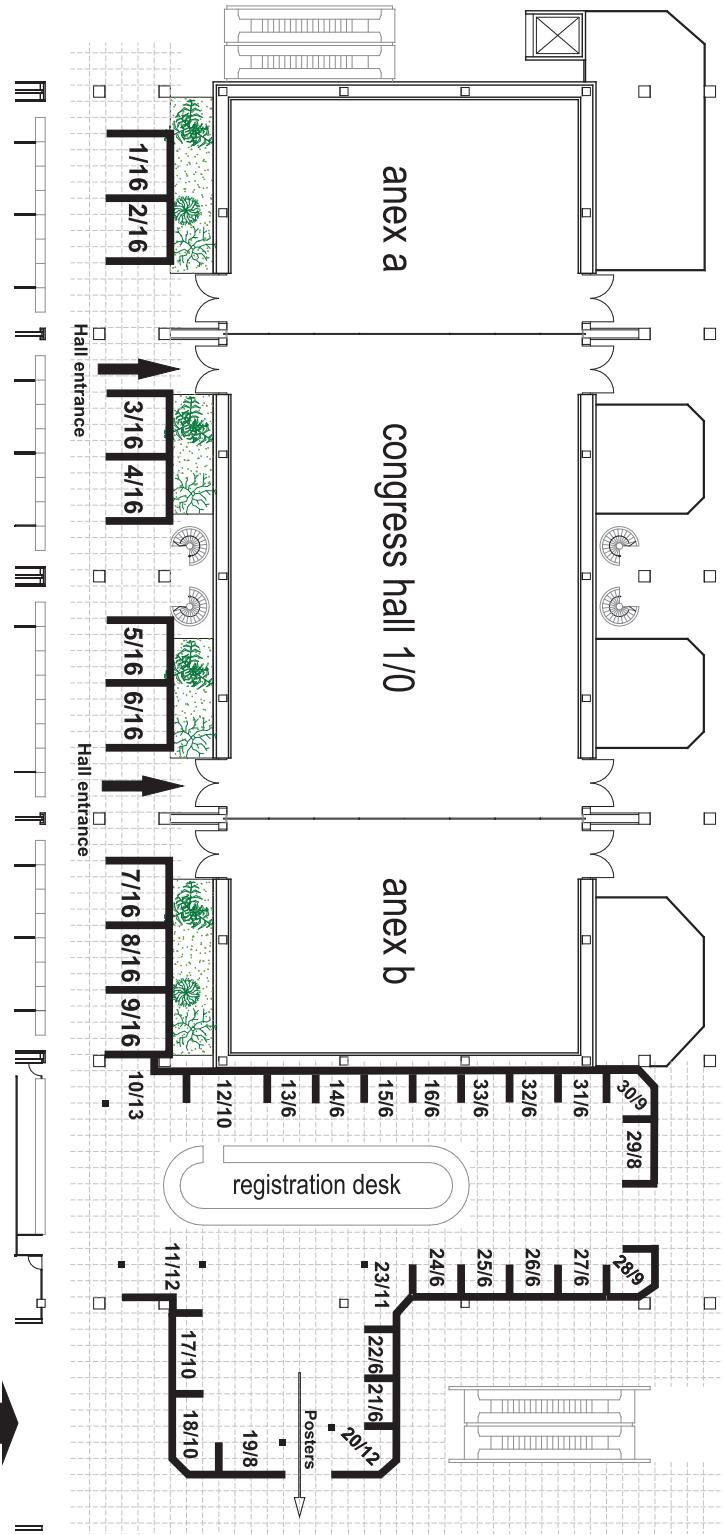
\* equivalent in serbian dinars

Price includes:

- *Attending scientific sessions*
- *Congress material*
- *Abstract book*
- *Coffee breaks and lunch*
- *Welcome Reception at The Royal Palace*
- *International Congress appointed by Serbian Health Council*  
*Act N<sup>o</sup> A-1-2104/12*  
*Lecturer - 15 points*  
*Oral presentation - 13 points*  
*Poster presentation - 11 points*  
*Passive attendance - 9 points*

## EXIBITORS AREA

Main entrance



## E X I B I T O R S

- |     |                           |     |                          |
|-----|---------------------------|-----|--------------------------|
| 1.  | <b>Zavod za udžbenike</b> | 17. | <b>Bimed - Medtronic</b> |
| 2.  | <b>Falk Pharma</b>        | 18. | <b>MSD</b>               |
| 3.  | <b>Storz</b>              | 19. | <b>Paroco</b>            |
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| 14. | <b>Pfizer</b>             | 30. | <b>Hapel</b>             |
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www.takeda.com



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Vladimira Popovića 6  
11070 Beograd  
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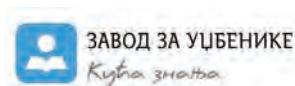
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Put Radomira Ivanovića 2  
81000 Podgorica, Montenegro  
Tel/fax: +382 20 658-028  
[info@plantaze.com](mailto:info@plantaze.com)

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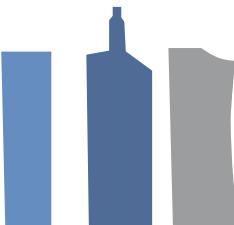


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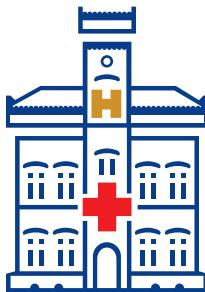
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**8<sup>th</sup> BIANNUAL  
INTERNATIONAL SYMPOSIUM  
OF COLOPROCTOLOGY**

**GENERAL SCIENTIFIC PROGRAM**

October 11-13<sup>th</sup>, 2012.

Sava Center, Belgrade  
Serbia

Official Congress language: *English*  
*Simultaneous translation to Serbian language provided*

Sessions:

- ***Session I - Colorectal Cancer- From TME to Pathohistology***
- ***Session II - Colorectal Cancer- From Surgery to Chemotherapy***
- ***Session III - IBD and Functional Disorders***
- ***Session IV - From Screening to Pathohistology***
- ***Session V - Treatment Algorithms in Proctology***
- ***Session VI - Consultant's Corner***
- ***Session VII - Video Session***

	<b>Thursday 11<sup>th</sup></b>	<b>Friday 12<sup>th</sup></b>	<b>Saturday 13<sup>th</sup></b>
<b>Morning</b>			
		07.30-18.00 Registration	07.30-12.00 Registration
		08.15-08.30 Official Opening	
	08.30-10.20 Session I - Hall 1	08.30 – 10.30 Session V - Hall 1	08.30 – 10.05 Session I - Anex B Free papers I
	10.25-11.00 Honorary Lecture	10.30-10.45 Coffee/exibition/ posters	
	11.00 – 11.15 Coffee/exibit./posters		
	11.20-13.05 Session II - Hall 1	10.45 – 12.30 Session VI - Hall 1 Consultan's Corner	10.20 – 11.55 Session II - Anex B Free papers II
	13.05 – 13.55 Lunch/exibition/ posters	12.30 – 12.40 Coffee/exibition/ posters	
	13.55 – 16.00 Session III - Hall 1	12.40 -14.10 Session VII - Hall 1	
<b>Afternoon</b>			
	16.00- 18.30 Registration	16.00 – 16.15 Coffee/exibit./posters	14.15 – 14.30 Best poster award
		16.15-16.55 Honorary Lecture	
		16.55 – 18.40 Session IV - Hall 1	14.35 – 14.50 Closing remarks
<b>Evening</b>	19.30 Opening ceremony	19.15 Reception in honour of participants at The Royal Palace	

*Thursday, 11<sup>th</sup> October*

*16.00- 18.30*

*Registration*

*Congress Sava Center*

*19.30*

*Opening ceremony*

*National Theatre*

*Friday, 12<sup>th</sup> October*

<i>07.30 – 18.00</i>	<i>Registration</i>	<i>Congress Sava Center</i>
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<i>08.15 – 08.30</i>	<i>Official opening</i>	<i>Congress Sava Center</i>
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<i>08.30 – 10.20</i>	<i>Hall 1/0</i>	<i>Session I - Colorectal Cancer</i>
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*Chairs: John Nicholls, Bela Teleky, Dragoslav Stevović*

<b>Time</b>	<b>Lecturer</b>	<b>Topic</b>
08.35 – 08.50	Bill Heald	TME - still the force for change in rectal cancer
08.52 – 09.07	Santoro Giulio Aniello	Preoperative staging of rectal cancer: role of 3D ultrasonography
09.09 – 09.24	Adam Dziki	Colorectal cancer in young patients
09.26 – 09.41	Irinel Popescu	Metastatic CRC – what about the primary?
09.43 – 09.58	Mariana Berho	Total mesorectal evaluation-how the pathologist can optimize outcomes
10.00 – 10.20	Panel discussion - Moderator John Nicholls	

## **Inauguration to the Honorary Doctor of Medical Sciences of The Belgrade University**

*Chairs: Vladimir Bumbaširević, Nebojša Lalić, Zoran Krivokapić*

<i>10.25 – 11.00</i>	<i>Honorary Lecture</i>
Steven Wexner	Recent international collaboration has advanced patient care

<i>11.00 – 11.15</i>	<i>Coffee/exhibition/posters</i>
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*Friday, 12<sup>th</sup> October*

11.20 – 13.05	Hall 1/0	Session II - Colorectal Cancer
<i>Chairs: Yves Panis, Ho-Kyung Chun, Vladimir Ćuk</i>		
Time	Lecturer	Topic
11.20 – 11.35	Evgeny Rybakov	Anal neoplasms. What do we know and what would we like to know?
11.37 – 11.52	Giovanni Romano	Extended APR for rectal cancer: is it really necessary in the neoadjuvant era?
11.54 – 12.09	Laszlo Damjanovich	Pelvic exenteration with immediate urinary reconstruction
12.11 – 12.26	Aleksander Stojadinovic	Advances in Targeted Nodal Assessment in Colon Cancer
12.28 – 12.43	Irene Kuhrer	Modern medical treatment of rectal cancer
12.45 – 13.05	Panel discussion - Moderator Yves Panis	

13.05 – 13.55	Lunch /Exhibition/Posters
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13.00 – 14.00	Lunch Symposium: “Johnson & Johnson Innovation Room – new technology”
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13.55 – 16.00	Hall 1/0	Session III - IBD and Functional Disorders
<i>Chairs: Ronan O'Connell, Giusto Pignata, Milan Breberina</i>		
Time	Lecturer	Topic
14.00 – 14.15	Lars Pahlman	Modern treatment of diverticulitis
14.17 – 14.32	Alexander Herold	Classification of outlet obstruction
14.34 – 14.49	Evaghelos Xynos	Functional results after surgery for repair of rectal prolapse or/and obstructive defecation syndrome
14.51 – 15.06	Yves Panis	Laparoscopy for IBD patients
15.08– 15.23	Tomas Skrička	Non IBD colitis - surgical interventions
15.25 – 15.40	Bela Teleky	Management of difficult stoma
15.40 – 16.00	Panel discussion - Moderator Ronan O'Connell	

Friday, 12<sup>th</sup> October

16.00 – 16.15

Coffee/exhibition/posters

## Inauguration to the Visiting Professor of Medical School of The Belgrade University

*Chairs: Nebojša Lalić, Zoran Krivokapić*

16.15 – 16.55

Honorary Lecture

Lars Pählman

State of art in radiotherapy of rectal cancer

16.55 – 18.40

Hall 1/0

**Session IV - From Screening to Pathology**

*Chairs: Alexander Herold, Andrew Zbar; Marjan Micev*

Time	Lecturer	Topic
16.55 – 17.10	Ronan O'Connell	Colorectal screening – the Irish perspective
17.12 – 17.27	Ho-Kyung Chun	Operating through a natural orifice
17.29 – 17.44	Dursun Bugra	Tips and tricks of difficult laparoscopic low colorectal anastomosis
17.46 – 18.01	Alex Duval	Microsatellite instability and cancer-from genomic to clinic
18.03 – 18.18	Slavica Usaj	Colorectal carcinoma under microscopy: pathology or much more ?
18.20 - 18.40		Panel discussion - Moderator Alexander Herold

19.15

*Reception in the honour of participants at  
The Royal Palace*

Saturday, 13<sup>th</sup> October

07.30 – 12.00

Registration

Congress Center Sava

08.30 – 10.30

Hall 1/0

**Session V - Treatment Algorithms in Proctology**

*Chairs: Adam Dziki, Giovanni Romano, Marko Kontić*

Time	Lecturer	Topic
08.35 – 08.50	Andrew Zbar	Transperineal ultrasound use in clinical proctology
08.52 – 09.07	Eva Csatar	HPV caused anal, peranal problems
09.09 – 09.24	Mehmet Ayhan Kuzu	Pilonidal disease – Treatment algorithm
09.26 – 09.41	Pravin Gupta	Anal Fissure –Treatment algorithm
09.43 – 09.58	Ronan O'Connell	Haemorrhoids – Treatment algorithm
10.00 - 10.15	John Nicholls	An overview of fistula and its current treatment
10.15 - 10.30	Panel discussion - Moderator Adam Dziki	

10.30 - 10.45

*Coffee/Exhibition/Posters*

10.45 – 12.30

Hall 1/0

**Session VI - Consultant's Corner**

*Chair: Steven Wexner*

*Panelist:*

*Mariana Berho, Bill Heald, Lars Pählman, John Nicholls, Andrew Zbar, Ronan O'Connell*

12.30 - 12.40

*Coffee/Exhibition/Posters*

*Saturday, 13<sup>th</sup> October*

<b>12.40 – 14.10</b>	<b>Hall 1/0</b>	<b>Session VII - Video Session</b>
<b>Time</b>	<b>Lecturer</b>	<b>Topic</b>
12.42 – 12.52	Giusto Pignata	Single Access Laparoscopic colorectal Surgery: lights and Shadows - Video
12.54 – 13.04	Irinel Popescu	The robotic approach in rectal cancer – clinical experience and preliminary results
13.06 – 13.16	Giovanni Romano	Pelvic reconstruction modalities after extended pelvicectomy
13.18 – 13.28	Yves Panis	TEM for T1 rectal cancer
13.30 – 13.40	Mehmet Ayhan Kuzu	Anatomical details of complete mesocolic excision
13.42 – 13.52	Dursun Bugra	Laparoscopic restorative proctocolectomies
13.55 – 14.10		Panel discussion - Moderator Tomas Skrcka

*Chairs: Marek Szczepkowski, Mehmet Ayhan Kuzu, Milan Breberina*

<b>14.15 – 14.30</b>	<b>Hall 1/0</b>	<b>Poster awards</b>
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Awards:

1<sup>st</sup> prize: Annual ESCP membership + 2013 ESCP Congress fee  
and accomodation

2<sup>nd</sup> prize: Annual ESCP membership + book: Rectal Cancer

3<sup>rd</sup> prize: Annual ESCP membership

<b>14.35 – 14.50</b>	<b>Hall 1/0</b>	<b>Closing remarks</b>
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*Saturday, 13<sup>th</sup> October*

## PARALLEL SESSION - FREE PAPERS

08.30 – 10.05	Session I	Anex B
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*Chairs: Constantinos Avgoustou, Franco Badessi, Ivan Stipančić*

O-1	08.30 – 08.37	Srđan Marković	High-Frequency Microsatellite Instability and BRAF Mutation (V600E) as Prognostic Indicators in Colorectal Cancer
O-2	08.39 – 08.46	Bojan Krebs	Locally Recurrent Rectal Cancer at Department for Abdominal Surgery, UKC Maribor
O-3	08.48 – 08.55	Zoran Petrović	Response to Chemotherapy Capox Plus Bevacizumab in Patients With Liver Metastases From Colorectal Cancer
O-4	08.57 – 09.04	Nikolaos Gouvas	Impact of Splenic Flexure Mobilization on Short-Term Outcomes After Laparoscopic Left Colectomy
O-5	09.06 – 09.13	Umberto Bracale	Single Access Laparoscopic Right Hemicolectomy
O-6	09.15 – 09.22	Igor Pravosudov	Clinical and Histopathological Results of Neoadjuvant Chemoradiotherapy for Rectal Cancer Patients
O-7	09.24 – 09.31	Srđan Nikolić	Ultraradical Surgery and Heated Intraperitoneal Chemotherapy (HIPEC) as Multimodal Treatment of Advanced Colorectal Cancer
O-8	09.33 – 09.40	Matija Horžić	Surgery for Colorectal Cancer and Quality of Life
O-9	09.42 – 09.49	Ivana Blažić	MRI of Rectal Cancer: Questions to Be Answered to the Surgeons?
09.50 – 10.05		<b>Remarks</b>	

*Saturday, 13<sup>th</sup> October*

10.20 – 11.55	Session II	Anex B
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*Chairs: Bojan Krebs, Umberto Bracale, Igor Pravosudov*

O-10	10.20 – 10.27	Đuro Koruga	A Colon Epithelium Tissue Characterization by Optomagnetic Spectroscopy
O-11	10.29 – 10.36	Dejan Jovanović	Endoluminal Ultrasound in Benign Anal Diseases -Our Experience-
O-12	10.38 – 10.45	Olivera Ivanov	The Utility of PET-CT in Management of Colorectal Cancer Patients
O-13	10.47 – 10.54	Franco Badessi	Rectal Resection With TME by Robotic Da Vinci System
O-14	10.56 – 11.03	Ivan Stipančić	Intraoperative and Postoperative Complications in Colorectal Surgery: Laparoscopic Vs. Open Surgery: A Single Surgeon Experience
O-15	11.05 – 11.12	Goran Stanojević	Rare Tumors of the Colon and Rectum: Overall Survival
O-16	11.14 – 11.21	Goran Barišić	GIST and Neuroendocrine Tumors of the Rectum
O-17	11.23 – 11.30	Milica Nestorović	Transanal Haemorrhoidal Dearterialization- Initial Experience
O-18	11.32 – 11.39	Constantinos Avgoustou	Haemorrhoidal Disease and Rectal Mucosal Prolapse Treated With Longo Stapled Haemorrhoidopexy: Early and Late Results
11.40 – 11.55		<b>Remarks</b>	



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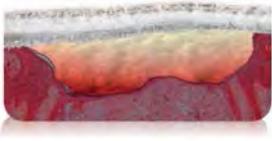
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## LIST OF SELECTED PAPERS - ORAL PRESENTATION

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O-1

## HIGH-FREQUENCY MICROSATELLITE INSTABILITY AND BRAF MUTATION (V600E) AS PROGNOSTIC INDICATORS IN COLORECTAL CANCER

S. Markovic<sup>1</sup>, J. Antic<sup>1</sup>, I. Dimitrijevic<sup>2</sup>, D. Bojic<sup>1</sup>, P. Svorcan<sup>1</sup>, V. Markovic<sup>2,3</sup>, Z. Krivokapic<sup>2,3</sup>

<sup>1</sup>Zvezdara University Hospital, Belgrade, Serbia

<sup>2</sup>Clic for Digestive Disease, Clinical Center of Serbia, Belgrade, Serbia

<sup>3</sup>Medical School of Belgrade University

**Background/Aims:** Microsatellite instability (MSI) is a genetic consequence of a MisMatch Repair (MMR) defect in colorectal cancer (CRC). We evaluated MSI status impact on disease course as well as BRAF mutation (V600E) in group of patients with MSI-H tumors.

**Method:** 155 primary CRCs were excised surgically, in period 2006-2010. MSI analysis was carried out using a fluorescence-based pentaplex polymerase chain reaction (PCR) technique. BRAF mutation (V600E) was analyzed by direct sequencing in MSI-H tumors. We defined the time of surgery as time zero and follow up the cohort up to September 2011 in term of any disease recurrence (local or distant). The main outcome was a disease-free survival (DFS) according to MSI status and BRAF mutated (mt) versus wild type (wt) in the MSI-H cases. Information about the clinical outcome was obtained by the periodic controls or direct telephone interview with the patients or their families. Recurrence-free probabilities and survival curve were generated using the Kaplan – Meier method. The log-rank test was used for the statistical differences. Results: Of the 155 CRCs, 19 (12,3%) were MSI-H, and 136 (87,7%) were MSS/L. BRAF mutations were found in 4 of the MSI-H tumors. 21 patients with CRC in stage IV did not undergo curative surgery; they were then excluded from the recurrences free probabilities estimation. DFS of patients exhibiting the MSI-H phenotype was statistically significantly better than patients with MSS/L tumor (log rank test 4,2; p=0,04). Patients with MSI-H tumor and BRAF mutation (n=4) had statistically significant lower DFS ie. higher recurrence rate than MSI-H tumors with BRAF wt (log rank test 6,7; p = 0,01). Two patients with MSI-H and BRAF mutation tumor had recurrent disease and no one in the group with MSI-H tumor without BRAF mutation. Conclusion: Patients with MSI tumor phenotype had favorable prognosis, but in those with BRAF mutation higher recurrence rate was observed. **Keywords:** colon cancer, microsatellite instability, disease-free survival, BRAF mutation.

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## LOCALLY RECURRENT RECTAL CANCER AT DEPARTMENT FOR ABDOMINAL SURGERY, UKC MARIBOR

Bojan Krebs, Miran Koželj, Stojan Potrč

Department for abdominal surgery, UKC Maribor, Slovenia

**Background.** Rectal cancer represents important factor of morbidity and mortality in developed countries. Although incidence of local recurrence after curative resection of rectal cancer diminishes is still notable fact which after several studies affects up to 30 percent of patients.

**Methods.** We checked and processed data of 836 patients which were operated on between 1.1.1996 and 31.12.2008 for rectal cancer in our institution. We were interested in local recurrence rate, time and method of local recurrence discovery and influence of some basic prognostic factors, such as tumor stage and type of operation.

**Results.** During the observation period, we operated on 836 patients with rectal cancer, 566 of them were included in the study. We've done mostly rectal resection with anastomosis and abdominoperineal excision. The local recurrence rate was 8.7 percent which is comparable to literature data. We were able to demonstrate that the risk for local recurrence was higher in patients with rectal cancer stage 3 and 4, while there was no difference in risk between the two largest types of operations.

**Conclusions.** Local recurrence is still a major problem after surgery for rectal cancer. According to our results there is higher risk of recurrence in patients with higher rectal cancer stages. It would be useful to follow up those patients intensively until the end of the third year after surgery, because in this time period, about 80 percent of local recurrences occur.

O-3

## RESPONSE TO CHEMOTHERAPY CAPOX PLUS BEVACIZUMAB IN PATIENTS WITH LIVER METASTASES FROM COLORECTAL CANCER

Z.Petrovic, N.Manojlovic, D.Tarabar, R.Doder

Dept. of GI oncology, Clinic of gastroenterology, VMA, Belgrade, Serbia

**Background:** Surgical resection is standard of care for patients with liver metastases from colorectal cancer, but only 15% to 30% patients could be undergone to surgery. Therefore most of the patients received systemic chemotherapy. We evaluate the effect of systemic chemotherapy with CapOx in combination with bevacizumab in patients with liver metastases from colorectal cancer.

**Methods:** 56 patients with colorectal cancer liver metastases were analyzed in a retrospective study. All patients received Oxaliplatin 85 mg/m<sup>2</sup> i.v. D1 and Capecitabine 1000 mg/m<sup>2</sup> D1-D14 with Bevacizumab 7,5 mg/kg i.v. D1. The cycles were repeated every 3 weeks. Operability was assessed every four cycles. All patients were analyzed for KRAS mutation status.

**Results:** RR was 71%. After chemotherapy 12 patients were underwent to surgery. PFS was 10.6 months. After 3 years of follow-up 23 patients are alive. G12D and G13D were most common KRAS mutation. The most common haematological toxicity was neutropenia in 14% of patients and neuropathy in 17% of patients was most common non-haematological toxicity.

**Conclusion:** The results of the study shows that adding bevacizumab to systemic chemotherapy with CapOx improves response and survival in all KRAS wt and KRAS mt patients with liver metastases from colorectal cancer. The type of KRAS mutation had no effect on response to chemotherapy.



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## IMPACT OF SPENIC FLEXURE MOBILIZATION ON SHORT-TERM OUTCOMES AFTER LAPAROSCOPIC LEFT COLECTOMY

N. Gouvas<sup>1</sup>, G. Gogos-Pappas<sup>2</sup>, K. Tsimogiannis<sup>2</sup>, C. Agalianos<sup>3</sup>, G. Pechlivanides<sup>3</sup>, E. Tsimoyiannis<sup>2</sup>, C. Dervenis<sup>1</sup>, E. Xynos<sup>1</sup>

“Agia Olga” Hospital of Athens, Athens, Greece

**BACKGROUND:** Depending on the extent of left colon resection, splenic flexure mobilization is sometimes necessary in order to achieve a tension-free anastomosis. The aim of the study was the assessment of necessity and impact on morbidity of splenic flexure mobilization for laparoscopic colectomy with anastomosis for diverticular disease and cancer located distally to the splenic flexure.

**METHODS:** Patients subjected to laparoscopic colectomy for diverticular disease and carcinoma located at any site from the descending colon to the distal rectum from 2004 to 2010 were reviewed. Comparisons were made between cases with and those without splenic flexure mobilization.

**RESULTS:** Two-hundred and fifty-five patients were included for analysis, 26 underwent laparoscopic surgery for benign disease whereas the rest 229 were operated for left colon or rectal cancer. There was no difference regarding the intraoperative bleeding and bowel perforation and no differences concerning the conversion rates. On the other hand stoma formation rates were higher in the mobilized group. Moreover, total operative time was higher for the mobilized group except from diverticular and middle rectum cancer cases. Postoperative outcomes as far as mortality and morbidity rates as well as primary hospital stay did not display any difference.

**CONCLUSIONS:** Splenic flexure mobilization can provide a tension free and sufficiently vascularized anastomosis in laparoscopic colorectal surgery for distal colon pathology, with no impact on immediate postoperative outcomes, despite longer operative time.

O-5

## SINGLE ACCESS LAPAROSCOPIC RIGHT HEMICOLECTOMY

U. Bracale<sup>1,2</sup>, S. Mijatovic<sup>3</sup>, F. Lazzara<sup>1</sup>, F. Perna<sup>4</sup>, F. Badessi<sup>4</sup>, G. Pignata<sup>1</sup>

<sup>1</sup>General and Mini-Invasive Surgical Unit, “San Camillo” Hospital, Trento, Italy

<sup>2</sup>Department of General, Vascular and Thoracic Surgery, University of Naples “Federico II”, Naples, Italy

<sup>3</sup>Department of Emergency, Clinical Centre of Serbia, Belgrade (Serbia)

<sup>4</sup>Department of General Surgery, “San Francesco” Hospital, Nuoro (Italy)

**Introduction:** Many series have demonstrated the advantages of laparoscopic over open colectomy for the management of benign and malignant disease.

With the aim to improve postoperative pain and cosmetics, and also to reduce hospital stay, many surgeons have been introducing in daily practice Single Access Laparoscopic Surgery (SALS).

The first described single-access laparoscopic procedure was an appendectomy for children in 1992, and in 1994 was followed by the first case series in adult.

Several studies were reported in Single Access Laparoscopic Colectomy (SALC).

The first Single Access laparoscopic right colectomy was described by Remzi et Al in a 67-year-old female with caecal polyp persisting after two colonoscopies.

Our experience in SALS started in 2009. We use this single access approach, previously, for Cholecystectomy, Hysterectomy and finally in Colorectal surgery.

**Abstract:** Single Access Laparoscopic Colectomy (SALC) was reported in several studies. The first Single Access laparoscopic right colectomy was described by Remzi et Al. We report our experience in SALC describing our approach for Right Colectomy. In our experience we perform as well an extracorporeal side-to-side anastomosis, in contrast with a conventional laparoscopic right colectomy in which we perform an intra-corporeal anastomosis. We think that an important limit of this approach is represented by the difficult to perform a safe intra-corporeal anastomosis. In conclusion we think that right SALC is a safe and feasible approach. However, many issues will be established, as well as technological, economical and educational aspects, before its introduction in the daily clinical practice.

**Key words:** Single Access laparoscopy, high anterior resection, laparoscopic surgery, minimally invasive surgery



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## CLINICAL AND HISTOPATHOLOGICAL RESULTS OF NEOADJUVANT CHEMORADIOTHERAPY FOR RECTAL CANCER PATIENTS

I.Pravosudov

N.N.Petrov Research Institute of Oncology, St.Petersburg, Russia

Greater understanding of the natural history of rectal cancer and the knowledge that a histologically involved circumferential resection margin (CRM) due to inadequate lateral dissection confers a high risk of local recurrence has driven technical advances in surgical technique.

However, even high-quality surgery cannot always achieve a curative resection for locally advanced achieve a curative resection for locally advanced cancers. Radiation therapy (RT) and chemoradiotherapy (CRT) have been widely employed in the treatment of rectal cancer. RT ensures tumor de bulking which makes it more amenable to surgical removal. Chemotherapy sensitizes the tissue further making it more radio responsive.

The purpose of the study was to evaluate clinical and histopathological results of rectal cancer patients treated by neoadjuvant chemoradiotherapy.

Methods: 109 patients with non-metastatic rectal cancer, located up to 15sm from anal verge, underwent neoadjuvant CRT including 50,4Gy and Capecabine 825mg/m<sup>2</sup>. Tumor response assessment was performed at least 8 week from CRT completion.

Results: Overall 70% of patients had significant tumor regression after 8 weeks from CRT and 23% - complete pathological response.

Conclusions: Neoadjuvant chemoradiotherapy leads to significant tumor regression and in some patients there is complete disappearance of the neoplasm. Pre- and post-treatment staging based on MRI allows an assessment of these features.

O-7

## ULTRARADICAL SURGERY AND HEATED INTRAPERITONEAL CHEMOTHERAPY (HIPEC) AS MULTIMODAL TREATMENT OF ADVANCED COLORECTAL CANCER

S. Nikolić

Institute for Oncology and Radiology, Belgrade, Serbia

**Aim:** Examine does aggressive surgical treatment in combination with HIPEC (oxaliplatin) could increase median survival in patients with advanced stage of colorectal cancer. **Method:** Ultraradical surgery and HIPEC was applied in patients who were initially with peritoneal carcinomatosis or infiltration in around organs. We evaluated the patients during the period 2000 - 2009 in this retrospective study.

**Results:** During 2000 and 2009 we performed 90 ultraradical surgical procedures which is considered: hysterectomy, bilateral adnexectomy and en block resection of rectosigmoid colon, total omentectomy, total peritonectomy, partial peritonectomy, splenectomy, liver resection. All patients were treated with HIPEC (40C) using oxaliplatin (410mg/m<sup>2</sup>) in 3l of perfusat during 90 minutes. The average duration of the procedure was 5h 57 minutes. The follow up period was 9 years. One year survival rate was 81, 25% and three year survival rate was 56, 25%.

**Conclusion:** Ultraradical surgery combined with HIPEC prolongs patient's survival and is considered to be a safe procedure if performed by the experience team of oncological surgeons.

**Keywords:** colorectal cancer radical surgery intraperitoneal chemotherapy.

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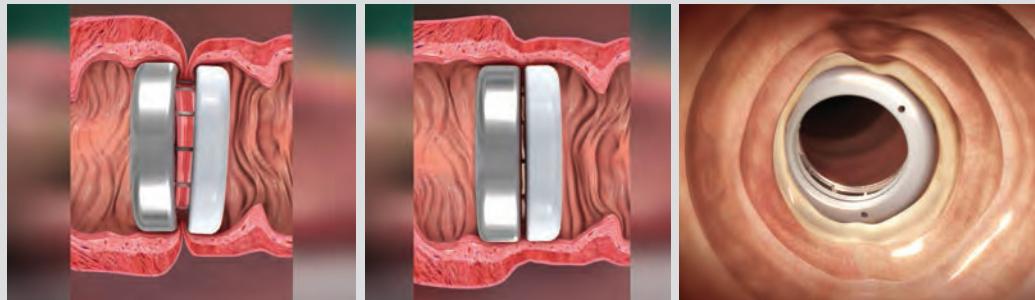
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1) Poupon, R.E. et al., Hepatology 1999; 29: 1668-71 2) Stiehl, A., Ital J Gastroenterol 1996; 28: 178-80 3) Pardi, D.S. et al., Gastroenterology 2003; 124: 889-93  
4) Brandaeter, B. et al., J Hepatol 2004; 40: 815-22 5) Serfaty, L. et al., Hepatology 2003; 38: 203-9



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Lee et al. 2011	65	1 (1.5%)
Avgoustou et al. 2012	31	1 (3.2%)
Dauser et al. 2011	29	1* (3.4%)
Buchberg et al. 2011	23	1 (4.3%)

Data and more information available at [www.novoGI.com](http://www.novoGI.com) \*Related leaks only

## SURGERY FOR COLORECTAL CANCER AND QUALITY OF LIFE

M. Horzic, M. Kopljarić, K. Cupurdija, D. Vanjak-Bielen, D. Vergles, L. Patrlj, Z. Lackovic

KB Dubrava, Zagreb, Croatia

**OBJECTIVES.** The purpose of this study was to assess the impact of surgery on early postoperative quality of life, before adjuvant treatment was initiated. **BACKGROUND.** Colorectal cancer is the second most common cancer. Although surgery remains the main modality of curative treatment, it may have profound impact on the postoperative quality of life of colorectal cancer patients. Adjuvant chemotherapy and radiotherapy may also have impact on the quality of life.

**METHODS AND RESULTS.** Patients with colorectal cancer who underwent surgical therapy in year 2005 were considered for the study. Altogether, 76 patients completed EORTC-C30 core questionnaire. Questionnaires were administered 1-3 days preoperatively and one month after surgery, on first postoperative follow-up. Significant differences were observed in certain aspects of quality of life as assessed by EORTC-C30 questionnaire. Comparing to preoperative values, patients with rectal cancer had significant reduction of physical ( $p=0.006$ ) and social functioning ( $p=0.028$ ) and complained of more fatigue postoperatively ( $p=0.049$ ). Patients with colon cancer also had significant postoperative reduction in physical functioning ( $p=0.024$ ), but demonstrated significant improvement in emotional functioning ( $p=0.041$ ), also having more financial difficulties ( $p=0.028$ ). Regardless of colostomy or continuity procedure, patients demonstrated worse postoperative physical functioning and complained of more fatigue. **CONCLUSIONS.** Surgery for colorectal cancer has significant impact on the quality of life. Different aspects of quality of life are affected in patients with colon cancer compared to those with rectal cancer.

O-9

## MRI OF RECTAL CANCER: QUESTIONS TO BE ANSWERED TO THE SURGEONS?

I. Blazic<sup>1</sup>, G. Lilic<sup>2</sup>, Z. Krivokapic<sup>2,3</sup>, Đ. Saranovic<sup>2,3</sup>

<sup>1</sup>KBC Zemun, Belgrade, Serbia

<sup>2</sup>Clinical Center of Serbia, Belgrade

<sup>3</sup>Medical School of Belgrade University

The primary goal of accurate imaging staging of rectal cancer is to identify the risk factors for local recurrence in order to offer patients the treatment based on their individual risk profile. We will try to give the questions and answers about the role of MRI and its significance for planning an effective therapeutic strategy for the individual patient. MRI has to determine location of the tumor, T stage, depth of mesorectal invasion with circumferential resection margin, N stage including lymph node involvement inside and outside mesorectum and effects of neoadjuvant therapy with restaging of rectal cancer after neoadjuvant treatment. MRI is highly accurate in assessment of the CRM. The crucial advantage of MRI is ability to evaluate precisely the topographic relationship of the tumor margins to the mesorectal fascia – the most important anatomic landmark for the feasibility of total mesorectal excision, and to predict whether or not it is likely that a tumor-free margin can be achieved and thus to provide important information for planning of an effective therapeutic strategy. At present, no imaging technique is reliable for exact nodal staging. A special problem associated with identifying lymphatic involvement in rectal cancer is high prevalence of malignancy in small lymph nodes. MRI using lymph node specific contrast could be promising for more accurate characterization of lymph nodes. The main problem in restaging of rectal cancer after neoadjuvant treatment is the discrimination of residual tumor in areas of fibrotic scar tissue. New imaging techniques combining anatomical and functional information need to be investigated to solve this issue. In conclusion, only the close cooperation of an experienced multidisciplinary team of surgeons and radiologists will allow to reach a high level of accuracy in rectal cancer staging and to develop an adequate individual strategy for successful treatment of patients with rectal cancer.



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## A COLON EPITHELIUM TISSUE CHARACTERIZATION BY OPTOMAGNETIC SPECTROSCOPY

D. Koruga<sup>1</sup>, A.Dragicevic<sup>1</sup>, V. Markovic<sup>2,3</sup>, Z. Krivokapic<sup>2,3</sup>, L. Matija<sup>1</sup>

<sup>1</sup>Biomedical Engineering, Faculty Of Mechanical Engineering, Faculty of Belgrade, Belgrade, Serbia

<sup>2</sup>Clinical Center of Serbia, Belgrade

<sup>3</sup>Medical School of Belgrade University

Opto-Magnetic Spectroscopy (OMS) is a technique based on the interaction of electromagnetic radiation with valence electrons within the sample material, therefore examining electron properties of matter (covalent bonds, hydrogen bonds, ion-electron interaction, Van der Waals interaction). Bearing in mind that the orbital velocity of valence electron in atoms is approximately  $10^6$  m/s, we calculated the ratio between magnetic force (FM) and electrical force (FE) of matter as being  $FM/FE \approx 10^{-4}$ . Since force (F) is directly related to quantum action, we conclude that the magnetic force is four orders of magnitude closer to quantum action and closer to detecting the conformation changes in the matter than the electrical force. This fact primarily influenced our choice of magnetic interaction as a main measurement modality. Optical modality was chosen because photons of visible light are ideal probes for states of valence electrons of matter with respect to sufficiently low energy levels and sensitivity. Also, visible light imaging is non-invasive and provides accurate information about higher level ordering of biological macromolecules, in an examination process that can be repeatedly conducted without presenting any risks to the patient or sample material. Finally, numerous advantages that are offered by digital image acquisition further encouraged the design of this technique and customized hardware solution that was used in this study. In this study we present preliminary results of 50 samples (healthy mucous tissue and cancer tissues) investigated by optomagnetic spectroscopy. The OMS technique has already yielded positive results in diagnosing epithelial tissues such as cervix, skin and oral cavity and other biological samples. The method is non-invasive, and applicable both in vitro and in vivo. These advantages provide basis for an excellent performance in the environment of screening testing, where speed, ease of use, accuracy and low costs equally contribute to successful early diagnosis.

O-11

## ENDOLUMINAL ULTRASOUND IN BENIGN ANAL DISEASES -OUR EXPERIENCE-

D. Jovanović, S. Stojanović, S. Crnogorac, A. Gluhović

Clinical Center of Vojvodina, Emergency Center, Emergency Surgery Division, Novi Sad, Serbia

**Introduction:** Benign disorders, such as perianal fistulas and collections, haemorrhoidal disease, disorders or trauma of the anal sphincters, are very common diseases in anorectal pathology. Ultrasound is simple, fast, harmless and cheap, widely accessible, method of examination. Its role is in making diagnosis, and possibility to give essential informations in decision-making process in constant cooperation between clinicians and radiologists. Its role in post procedural follow of the patient is also remarkable. With its up to date probes and improving visualization technology, as well with educated operating radiologist, and fluent communication between radiologist and clinician, the importance of the endoanal ultrasound in future will undoubtedly be even more important.

**Material and methods:** In Clinical centre of Vojvodina, in period of 12 month (aug 2011-aug 2012) there has been over 150 endoanal ultrasound examinations. GE Logiq7 ultrasound with 9 MHz endoanal probe was used, and this paper is about our first experiences in this field. Most of the patients were diagnosed with perianal fistulas, and haemorrhoidal disease of various degree, and good cooperation between radiologist and surgeon was established in order to improve surgical approach and treatment.

**Results:** relating ultrasound and intraoperative findings, as well as ultrasound influence in grading and follow-up of the haemorrhoidal disease, showed great usefulness for both surgeons and patients. **Conclusion:** according to our experience endoluminal ultrasound is simple and reliable method of evaluating existence, extent and curability of benign anal diseases, and with up to date equipment, and good cooperation between surgeon and radiologist its role is becoming invaluable.



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**THE UTILITY OF PET-CT IN MANAGEMENT OF COLORECTAL CANCER PATIENTS**

O. Ivanov<sup>1</sup>, J. Mihajlović<sup>1</sup>, M. Erak<sup>1</sup>, D. Ivanov<sup>2</sup>, R. Cvijanović<sup>2</sup>, E. Matovina<sup>1</sup>, B. Basarić<sup>1</sup>

<sup>1</sup>Institute for Oncology of Vojvodina, Novi Sad, Serbia

<sup>2</sup>Clinical Center of Vojvodina, Novi Sad, Serbia

**Introduction:** Despite recent advances in colorectal cancer surgery, chemotherapeutic agents and radiotherapy treatment, the prognosis for colorectal cancer remains poor. In colorectal cancer prognosis, therapeutic option strictly depends on accurate evaluation of tumor extension and early identification of distant metastases. MR imaging is so far the preferred first-line modality for evaluating primary disease. In recent years, the introduction of whole body imaging modalities has been undertaken to modify diagnostic concepts in management of these patients. The role of PET-CT is not yet clear owing to the small number of studies.

**Objective:** The objective of this study was to compare the diagnostic performance of MR and PET-CT as imaging modalities for the staging of colorectal cancer. We aimed to estimate whether PET-CT could play a role in initial staging and does it has an impact on its treatment.

**Materials and methods:** PubMed and Embase were searched for articles published from January 2005 to January 2011 that fulfilled inclusion criteria: patients didn't undergo surgery, chemotherapy or radiotherapy for any oncological disease before, patients had histopathologically proved colorectal carcinoma, MR and PET-CT were performed for the initial staging. Histopathologic examination was used as the reference standard.

**Results:** 16 articles were included. PET-CT imaging has been found to increase the accuracy in staging to 89% compared with 78% when MR was performed for initial staging. Assessment of lymph node involvement based on size criteria is unreliable and no significant difference in size was found on MR between benign and malignant lymph nodes. A change in tumor stage occurred in approximately a third of patients. Therapeutic protocol changed after PET-CT in 30% of patients.

**Conclusion:** PET-CT impacts the management of patients with primary colorectal cancer patients and changes therapy modality in a third of patients. Therefore, PET-CT should be performed at initial colorectal cancer staging.

O-13

## RECTAL RESECTION WITH TME BY ROBOTIC DA VINCI SYSTEM

F. Badessi<sup>1</sup>, G. Pignata<sup>1</sup>, S. Mijatovic<sup>2</sup>, F. Perna<sup>1</sup>

<sup>1</sup>Department of General Surgery, Laparoscopic and Robotic Surgery, San Francesco Hospital, Nuoro, Italy

<sup>3</sup>Department of Emergency, Clinical Centre of Serbia, Belgrade (Serbia)

**Background:** The aim of this study is to evaluate the advantages of da Vinci robotic system (Intuitive Surgical®) to the treatment of patients with rectal cancer.

**Methods:** From March 2009 to August 2012 we performed by da Vinci robotic system (Intuitive Surgical®) 63 procedures for low rectal cancer. From November 2011 we used the new da Vinci robotic system (Intuitive Surgical®). The patients with rectal cancer (12 female and 29 male, mean age of 65,7 years range 45-88) were studied by colonoscopy with biopsies, barium enema to achieve the correct side of neoplasm, thorax/abdomen TC, transrectalecoendoscopy when indicated. We performed in all patients a transomental approach to the mobilization of left colon from splenic flexure. In all patients we performed the ligation and section at the origin of the AMI and VMI by clip. In all cases we performed a Knight-Griffen anastomosis with ileostomy. In 9 cases we performed an abdominoperineal resections. In 8 cases we performed a Hartmann procedure.

**Results:** The mean operation time was 217.5 min (+/ 37, 6 min). All procedures were successful and the conversion rate was 3.6%. The mean postoperative hospital stay was 6.3 days (range 5, 2-8, 9). A total mesorectal excision with negative circumferential and distal margins was accomplished in all patients, and a median of 19 (range 11-26) lymph nodes was removed. The anastomotic leak rate was 7.8%.

**Conclusion:** In our initial experience we observed that the advantages of robotic da Vinci System's are represent to the major facility and precisionness to perform the TME and in particular we observed a better view of nerve structures and more facility. Moreover robotic TME seems to enhance microdissection accuracy leading to a better and comfortable mesorectal dissection with a lower risk of positive CRM (Patriti et al Minerva Chir 2010). In conclusion, robotics surgery can be improve laparoscopic TME. A longer operating time is needed.

Robotic technology also eliminates the fatigue associated with conventional laparoscopy. Uhrich et al. have demonstrated that the unnatural positions assumed during laparoscopy contribute to surgeon fatigue and injury.



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**INTRAOPERATIVE AND POSTOPERATIVE COMPLICATIONS IN COLORECTAL SURGERY: LAPAROSCOPIC VS. OPEN SURGERY: A SINGLE SURGEON EXPERIENCE**

I. Stipancic, M. Knezevic, J. Bakovic, M. Miocinovic, T. Kolak, R. Klicek, I. Runjic

KB Dubrava, Zagreb, Croatia

**Background:** Open and laparoscopic colorectal surgery have risks of intraoperative and postoperative complications. Recent data have shown that intraoperative complications may be increased in laparoscopic surgery. Here we report our prospective study result comparing intraoperative and postoperative complications after open and laparoscopic colorectal resections done by single surgeon.

**Methods:** Laparoscopic colorectal resections patients were matched for age, gender and disease comparing to patients underwent operation by the open approach during the same period (2005 to 2010) in Clinical Hospital "Dubrava" Zagreb, Croatia.

**Results:** A total of 137 patients (119 malignant, 18 benign conditions) underwent laparoscopic (68) and open (69) resections. Of all laparoscopic procedures 9 (9/68, 13.24%) were converted to open surgery. Majority of conversion (7 pts) were preemptive due to T4 (5 pts) and bulky tumor (2 pts). Intraoperative complication mandated conversion in 2 pts (2 /68, 2.94 %). In 1 due to uncontrolled bleeding and in 1 due to urethral lesion. No intraoperative complications during open surgery were detected. Postoperative complications occurred in 15 patients (15/137, 10.95 %). Among them 9 (9/69, 13.04%) were submitted to open and 6 (6/68, 8.82 %) to laparoscopic surgery. Wound infection developed in 8 pts: 5 of 69 (7, 25%) in open and 3 of 68 (4,41%) in laparoscopic surgery. Anastomotic leak occurred in 4 pts (4/76, 5, 26%); 3 of 50 (6%) after laparoscopic and 1 of 26 (3.85%) after open approach, all after low rectal resections. Other complications included paralytic ileus and small bowel obstruction in 3 pts after open resections. Due to complications 10 pts (10/15, 66.7 %) were reoperated. Hospital stay for patients with complications was longer. **Conclusion:** Laparoscopic colorectal surgery showed more intraoperative complications than open surgery. Postoperative complications occurred more frequent in open surgery. The number of patients is small for serious conclusions but seems that shows trends.

O-15

## RARE TUMORS OF THE COLON AND RECTUM: OVERALL SURVIVAL

G. Stanojevic, M. Nestorovic, B. Brankovic, D. Mihailovic, D. Miljkovic, V. Pecic, D. Petrovic, A. Todorovic

Clinic for General Surgery Clinical Center Nis, Nis, Serbia, Medical School of Nis University, Nis, Serbia

**Introduction:** Rare tumors of the colon and rectum constitute approximately 5% of all malignancies of the large bowel. Literature data mostly provide the results of small case series published because there is no significant experience concerning the survival period of the operated patients.

**Methods:** The paper shows the results of the overall survival of the operated patients with five types of rare tumors of the large bowel during the period from 1998 to 2008. During this period a total of 1795 patients underwent treatment for the large bowel malignancies. Out of 1795 patients, there were 79 (4.4%) with rare tumors: 22 (27.8%) had lymphomas, 47 (59.5%) had carcinoids, 3 (3.8%) had melanomas, 2 (2.5%) had GI stromal tumors and 5 (6.3%) patients had squamous cell carcinoma.

**Results:** Average age of all patients was 60.69 years and there were 53 (67%) males and 26 (33%) females. Overall survival in all patients was  $47.163 \pm 2.606$  months. The longest survival was in patients with carcinoid ( $54.362 \pm 2.370$  months) while the shortest survival was found in patients with melanoma ( $13.000 \pm 2.646$ ).

**Conclusions:** This study is unique in our country and it shows survival rates for rare tumors of the large bowel.



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## GIST AND NEUROENDOCRINE TUMORS OF THE RECTUM

G. Barisic<sup>1,2</sup>, V. Markovic<sup>1,2</sup>, S. Antic<sup>1</sup>, M. Popovic<sup>1</sup>, Z. Krivokapic<sup>1,2</sup>

<sup>1</sup>Clinical Center of Serbia, Belgrade

<sup>2</sup>Medical School of Belgrade University

Gastrointestinal stromal tumor (GIST) is the most common mesenchymal neoplasm arising in the digestive tract, with an estimated prevalence of 15–20 per 1,000,000. GISTS are related to the interstitial cells of Cajal and are characterized by constitutive over-expression of the transmembrane tyrosine kinase receptor KIT. As c-kit is recognized by the antibody CD117, its expression can be proven by means of immunohistochemical method allowing the pathologists to accurately discriminate GISTS from other mesenchymal gastrointestinal tumors. Colorectal GISTS represent about 5–10% of the cases, mainly located in the rectum that is the third common site. Rectal GIST account for 4 % of all GIST resulting in 800–1,000 new cases in the European Union per year. Clinical behavior of GIST can vary from indolent to aggressive, but benign GISTS are far more common than malignant ones (10–30%). Size and mitotic activity contribute to the risk estimation for “malignant behavior” of GIST according to the NCI consensus classification. It has been shown that independently of size and mitotic rate, the location of GIST is a prognostic factor. Surgery with histologically negative margins is the recommended primary treatment in nonmetastatic GIST. Resection of rectal GISTS can be difficult and is often associated with considerable morbidity. Rectal GISTS are often large tumors and densely adherent to the pelvic floor musculature and surrounding organs. A formal mesorectal excision is not necessary as GIST does not metastasize through lymphatics and skip metastases have never been reported. Small rectal GIST (under 3 cm) with a limited extrarectal component can be treated by local excision as long as clear margins are achieved, whereas large tumors require resectional surgery, occasionally pelvic exenteration, to obtain R0 resections. For lesions in the lower rectum, an abdominoperineal resection is often necessary. Liver and peritoneum are the most common sites of distant relapse, and half of the cases of local recurrences exhibit liver metastases. Imatinib, a selective tyrosine kinase inhibitor targeting the c-KIT or PDGFRA activated GISTS, has become the first line therapy for advanced (i.e., primary non-resectable or metastatic) GISTS. It induces tumor volume reductions in over half of treated patients. Therefore, tumor downsizing with imatinib might be crucial to perform less extensive surgery with a decreased risk of functional morbidity and neurologic impairments.

O-17

## TRANSANAL HAEMORRHOIDAL DEARTERIALIZATION- INITIAL EXPERIENCE

M. Nestorovic, G. Stanojevic, A. Todorovic, D. Miljkovic, D. Mihailovic, B. Brankovic, V. Pecic, D. Petrovic

Clinic for General Surgery Clinical Center Nis, Nis, Serbia

**Introduction:** Haemorrhoidal disease is frequently occurring in modern societies. Many different procedures are employed for treatment of haemorrhoids. Transanal haemorrhoidal dearterialization (THD) is a nonexcisional procedure providing Doppler-guided ligation of hemorrhoidal arteries in order to reduce arterial flow.

**Patients and methods:** From April 2012 until Jun 2012 ten patients (7 male and 3 female) with hemorrhoids grade II and III underwent ligation of the haemorrhoidal arteries 2 cm above the anorectal junction. An average of 6 arteries were identified and transfixed, mucopexy was performed in all patients. The THD® (TransanalHaemorrhoidalDearterialisation) device was used in all cases. Immediate and short-term results were evaluated. Operating time, intraoperative and postoperative complications, hospital stay and ability to return to daily activities were recorded.

**Results:** The mean age was 47.5 years (31-65 years). The mean operating time was  $35 \pm 11$  min. There were no intraoperative complications. One patient developed a sub-mucosal hematoma postoperatively and one patient had haemorrhoidal thrombosis which didn't require surgery. The pain, according to a visual analogue scale (VAS) was 4.5 on the first postoperative day. Three patients required analgesia on the second postoperative day. Pain resolved 72 hours postoperatively in all patients. No urinary retention or bleeding was recorded. The mean hospital stay was 1.5 days (0-2), and all patients return to normal daily activities after 4-5 days. Further follow up is needed for long term results. **Conclusion:** According to our initial experience haemorrhoidal dearterialisation is safe and effective procedure with low percentage of complications and postoperative pain.

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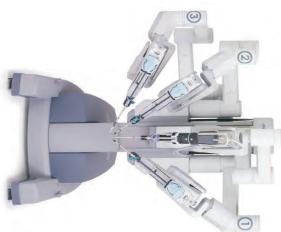
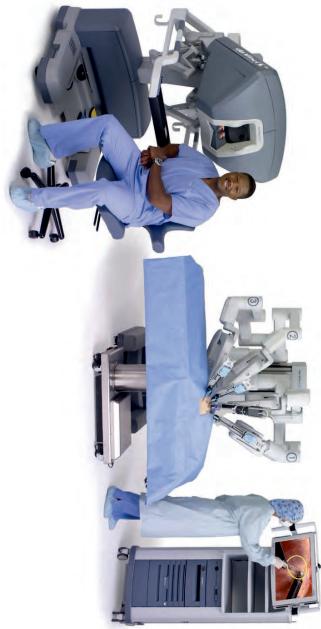
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## HAEMORRHOIDAL DISEASE AND RECTAL MUCOSAL PROLAPSE TREATED WITH LONGO STAPLED HAEMORRHOIDOPEXY: EARLY AND LATE RESULTS

C. Avgoustou, Th. Piperos, A. Papazoglou, Ch. Belegris, S. Fountas, P. Penlides

General Hospital of Nea Ionia “Constantopoulion - Aghia Olga”, Athens – Greece

We review our experience with Longo stapled haemorrhoidopexy (LSH) in treatment of haemorrhoidal disease (HD) and rectal mucosal prolapse (RMP). Seven hundred twenty symptomatic patients, mean aged 52.5 years, underwent LSH from 1/1999 – 6/2012. Six hundred ninety had HD (Haemorrhoidal degree, 2nd: 52, 3rd: 522, 4th: 116), with comorbidity of other anal disease (RMP, fissure, fistulae) in 66. Pure RMP had 30. All were assessed with symptom questionnaire, proctological examination and rectosigmoidoscopy. Patients >50 years had complete colonoscopy. All underwent LSH by means of PPH or similar staplers under general, spinal or epidural anesthesia. LSH was combined with internal sphincterotomy, haemorrhoidectomy or fissurectomy in 68. In 19 with RMP and 12 with HD the stapler was applied twice. Postoperatively, pethidine hydrochloride I.V. was administered. Patients were discharged once they required no further I.V. analgesia. A visual analogue scale (VAS, 0-10) was used for the first 440. Their requirements in analgetic injections were: none in 49%, 1 in 35%, 2 in 11% and 3 or more in 5%. For the rest, analgetics were administered even less frequently. Early complications occurred in 28: bleeding required revision (8), 3-day pain >5 in VAS (19), perineal haematoma (9). Mean hospital stay was 1.2 days. All patients returned to pain-free defecation and normal activity within 10 days. All were clinically examined at 1, 2, 4, 12 weeks and contacted yearly for 4 years. During follow-up period, 6 recurrences were reported and all had completion LSH. The first step of correct positioning the transparent dilator is the mainstay of technique. Following firing of instrument, an excised intact donut confirms that procedure was properly performed. Accessory procedures can be performed either before or after stapling. Forth degree haemorrhoidal disease is not a contraindication for LSH. LSH is safe and effective procedure with good early and late results.

L-1

## RECENT INTERNATIONAL COLLABORATION HAS ADVANCED PATIENT CARE

Dr. Steven D. Wexner

Cleveland Clinic Florida

The impact of international collaboration on patient care may be best exemplified by the recent advances in sphincter preservation. There are three main groups of patients who are at high risk for a permanent stoma: patients with rectal cancer, mucosal ulcerative colitis, or fecal incontinence. Many patients with rectal cancer are now offered sphincter-saving treatment with excellent outcomes as a result of advances including total mesorectal excision, neoadjuvant radiotherapy, double-stapling, laparoscopy, endoscopic microsurgery and watchful-waiting. Patients with mucosal ulcerative colitis, who previously were routinely offered a Brooke ileostomy, now have excellent quality of life with developments including the ileoanal J pouch, abandonment of routine mucosectomy and laparoscopy. Through innovations across the globe, patients with fecal incontinence benefit from a plethora of technologies that can be tailored to their individual needs. In colorectal surgery, international collaboration has resulted in exemplary advances in sphincter preservation which have drastically improved patients' lives.

Key words: sphincter preservation, fecal incontinence, rectal cancer, mucosal ulcerative colitis, international collaboration

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## COLORECTAL SCREENING – THE IRISH PERSPECTIVE

P.R. O'Connell, MD, FRCSI

Section of Surgery and Surgical Specialties, University College Dublin and Centre for Colorectal Disease, St Vincent's University Hospital, Dublin, Ireland

In Ireland, as in most of Europe, colorectal cancer is the second most commonly diagnosed cancer. The burthen of the disease is growing due to an increasing and aging population. In December 2003, the Council of the European Union made a recommendation (2003/878/EC) that member states introduce evidence-based cancer screening though a systematic population-based approach with quality assurance at all appropriate levels. As part of this policy it was recommended that faecal occult blood based screening be introduced for both men and women in the age group 50-74.

The Irish Department of Health and Children established an expert working group that recommended:

Target population 55-74

Biennial Screening

Participation target 60%+

An immunochemical faecal occult blood test on an automated platform

Colonoscopy offered to those with a single positive iFOBt

CT colonoscopy as a supplementary screening test

The report was subject external international review and a Heath Technology Assessment exercise. Both endorsed the recommendations and concluded that biennial iFOBt would be highly cost effective compared to a policy of no screening (estimated €1696/QALY) with an estimated lifetime reduction in the incidence (14.7%) and mortality (36.0%) from colorectal cancer.

The programme is due to commence in 2012. Regional screening centres are being identified to provide screening colonoscopy. These centres must meet JAG (Joint Advisory Group) in GI endoscopy criteria and a comprehensive QA programme is being put in place. In addition, surgical cancer services, including those for colorectal cancer, are being restricted to 8 regional cancer centres.

L-3

## HAEMORRHOIDS – A TREATMENT ALGORITHM

P.R. O'Connell, MD, FRCSE

Section of Surgery and Surgical Specialties, University College Dublin and Centre for Colorectal Disease, St Vincent's University Hospital, Dublin, Ireland

Haemorrhoids are natural venous plexuses found in the submucosa of the upper anal canal (internal) and in the subcutaneous tissue of the perianal skin at the anal opening. Enlargement due to increased intra-abdominal or portal venous pressure may lead to intermittent fresh rectal bleeding during and immediately following defaecation particularly if the stool consistency is hard (Grade 1). Haemorrhoidal prolapse occurs if the haemorrhoid becomes further enlarged (Grade 2) and gives rise to mucus discharge and pruritis in addition to bleeding. If large enough manual reduction of the prolapse is required (Grade 3). Rarely reduction is impossible and blood within the haemorrhoid thromboses (Grade 4) giving rise to severe pain, fever and discharge.

The diagnosis always requires anoscopic confirmation as most perianal symptoms are attributed by patients to haemorrhoids. Patients over the age of 40 should be considered for additional screening to rule out colonic neoplasia.

Grade 1 haemorrhoids are usually managed conservatively with dietary measures and stool softeners. Injection of sclerosing agents into the rectal mucosa above the haemorrhoid may be useful but care is needed to avoid infection of ulceration. Topical creams may reduce discomfort. There are data to support the use of oral flavinoids in treatment of early haemorrhoids.

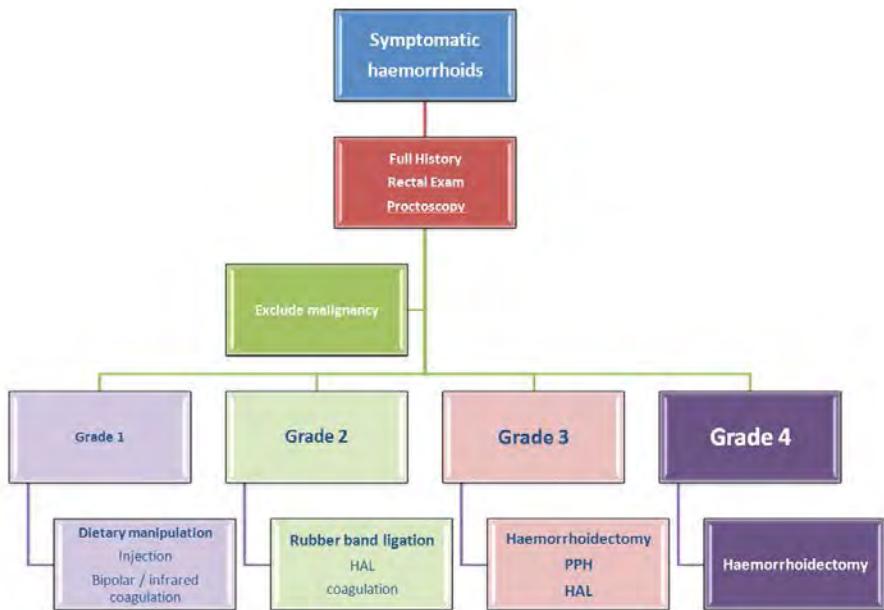
Grade 2 disease is most commonly treated with rubber band ligation which now can be easily performed with disposable single handed instruments. Care must be taken to place the bands correctly as pain can be intense if sensate epithelium is included. Later complications of bleeding and sepsis are rare. Various techniques of haemorrhoid coagulation (bipolar, cryo, infrared) have been described but are not in widespread use.

Surgical intervention is usually reserved for Grade 3 haemorrhoids. Conventional haemorrhoidectomy using either an open (Milligan Morgan) or closed (Ferguson) technique is a time honoured and successful operation. The techniques are equivalent and it seems not to matter whether scissors or diathermy excision is undertaken. Antibiotic prophylaxis with metronidazole may reduce postoperative pain as may dissection with Ligasure™. Day case surgery is now the rule in most institutions.

Stapled Haemorrhoidopexy or PPH (Procedure for Prolapse and Haemorrhoids) is a good alternative to conventional haemorrhoidectomy in most patients. It results in less post-operative pain and quicker return to work. It is however more expensive, has a higher recurrence rate and is not suitable for patients with large external skin tags. HAL (haemorrhoidal artery ligation) is a relatively new technique that allows accurate ligation of the main haemorrhoidal vascular pedicles

but evolves no tissue excision. The results are comparable to PPH.

There is little consensus concerning the management of Grade 4 haemorrhoids. Early surgical excision is feasible in many patients and can be facilitated by submucosal injection of hyaluronidase. A circumferential Whitehead technique may be required.



Treatment algorithm for Haemorrhoids.

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P-1

## TREATMENT OF RECTAL CANCER: A CLINICAL STUDY IN THE PERIOD OF 2006-2011

F. Mitrovic, Z. Rifatbegovic

Clinic for Surgery, Clinical Center Tuzla, BiH

**Introduction.** Colorectal cancer is third among all malignancies according to global annual incidence and mortality. The prognosis of rectal carcinoma is determined by the surgical resection and the anatomic extend of disease. **Patients and methods.** This study analyzed retrospectively surgical treatment for rectal cancer at Department of surgery University Clinical Center Tuzla. In the period 2006-2011, there have been 69 patients who underwent surgery for rectal carcinoma. Age, sex, type of surgery, postoperative morbidity and mortality were analyzed. The results were compared to recent literature. **Results.** Among 69 patients there were 51 (74%) male and 18 (26%) female, between 46 and 83 years with an average age of 64 years (SD+12). The most of the patients were operated on for an elective surgery and 6 (9%) patients were underwent an urgent operations. The most common surgery was Miles-Thompson cancer excision with a terminal colostomy in 42 (61%) patients. The rest of the patients were operated on for a Dixon surgery (39%). There were 3 (4%) postoperative complications with dehiscentio anastomosis and there was no postoperative mortality.

**Conclusion.** The best solution for patient with rectal cancer is a radical tumor resection. In other cases, a cancer excision with a terminal colostomy is choice treatment. Rate of postoperative complications is comparable to other studies.

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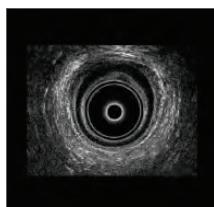
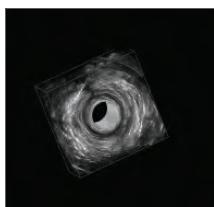
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## PROGNOSTIC SIGNIFICANCE OF MUCINOUS CARCINOMA OF COLON AND RECTUM: OUR CLINICAL STUDIES

S. Maksimovic, S. Lovric, Z. Pejovic, M. Popovic, Z. Matkovic, D. Zivanovic

General hospital Sveti Vracevi, Bijelljina, Bosnia and Herzegovina

**Purpose:** Mucinous adenocarcinoma (MC) is a subset of histological subtypes of colorectal adenocarcinoma, accounting for 10%–20% of all colorectal cases. The purpose of this study was to clarify whether the mucin-producing histological type of carcinoma is associated with a worse prognosis than nonmucinous, differentiated colorectal adenocarcinoma for patients who undergo curative surgery.

**Methods:** On general surgery between 2000 and 2011, were operated 576 patients. 74 (12, 8%) patients was found mucinous colorectal adenocarcinomas. 502 patients was found nonmucinous colorectal adenocarcinomas. We also evaluated the outcomes of patients who underwent surgery with curative intent. To determine whether the mucinous adenocarcinoma itself was independent prognostic factor in the curative resected patients, a multivariate analysis was performed.

**Results:** The mucinous adenocarcinoma patients were found to be younger ( $p < 0,001$ ), have more lymph node metastases (49% vs. 40, 1%,  $p < 0,0056$ ), more peritoneal dissemination (18,7% vs. 5,1%,  $p < 0,0001$ ), greater frequency of advanced stage disease ( $p < 0,0006$ ), lower rate of curative resection (77,8% vs. 86,2%,  $p < 0,0045$ ), and lower overall 10 -year survival rates (13,8% vs. 61,2%,  $p < 0,0002$ ), than patients with nonmucinous adenocarcinoma patients.

**Conclusions:** The mucinous histological type itself was an independent factor for poor prognosis for patients who underwent curative surgery.

P-3

## RELATIONSHIP BETWEEN HEREDITARY FACTOR AND CLORECTAL CARCINOMA OCCUR - 5 YEAR ANALYSIS IN DISTRICT GENERAL HOSPITAL

D. Dabić, I. Kostić, V. Peruničić, N. Pijanović, B. Marić

General Surgery-General Hospital Cacak, Cacak, Serbia

Introduction: CRC occurrence between family members is a well-known fact. The aim of this retrospective analysis is to show CRC frequency in relationship with heredity for 5 year period in district general hospital.

Methods: During the period January 2007 till the January 2012, 163 cases of the CRC have been diagnosed. All the patients were interviewed about CRC history in their family. Results: In the 5 year period we investigated 163 CRC cases. Sex ratio was 103 (63,19%) male and 60 (36,81%) female. The mean age was 69,2 years (33-92). According to localization, tumor frequency were: caecum 22 (13,5%), ascending colon 6 (3,68%), hepatic flexure 4 (2,45%), transverse colon 6 (3,68%), splenic flexure 3 (1,84%), descending colon 3 (1,84%), sigmoid colon 19 (11,66%), rectosigmoid junction 30 (18,4%), rectum 65 (39,88%) and anal canal 5 (3,07%) cases. Thirty-one patients had family history data about CRC, FAP and IBD (ulcerative colitis). In 14 (45, 16%) patients first degree relatives had some of the mentioned disease, in 11 (35, 48%) patients second degree relatives had some of the risk factor and in 6 (19, 35%) patients third degree relatives were affected.

Conclusion: Hereditary factor has a great influence on the CRC occurrence and because of that the act of developing National program for CRC screening has a crucial stage in decrease morbidity and mortality rate.

Key words: CRC, family history data, hereditary factor.



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## SURGICAL TREATMENT OF COLORECTAL CANCER METASTASES IN LIVER

I. Đurisic, S. Nikolic, M. Inic, M. Zegarac, M. Buta, M. Kocic

Institute for Oncology and Radiology, Belgrade, Serbia

**Background:** Colorectal cancer metastases can be primarily treated by surgery or after neoadjuvant treatment. Liver metastases are the only ones who have specific therapy directed to them. Patients with colorectal cancer will have liver metastases in 50% of cases. Life expectancy of untreated patients with liver metastases is 6-18 months.

**Patients and Methods:** Surgical procedures of liver metastases include anatomical or extraanatomical resection, radiofrequency ablation and the combination of resection and ablation. In the period from June 2007 to January 2010, we operated on 78 patients with colorectal cancer metastases in liver. We evaluated the results in retrospective study.

**Results:** Out of 78 patients we performed surgical resections in 46 patients. We performed 14 hepatectomies, 5 left lobectomies, 11 resections of two segments, 9 resections of one segment. In all other patients we performed extraanatomical resections of metastases. We used cavitron CUSA for liver resections; in 21 patients we performed radiofrequency ablation (RAT) of multiple liver metastases (3-9). The ablations were performed after laparotomy by Radionics. We used combination of liver resection and ablation procedures in 17 patients. In 27 patients liver surgery was performed in the same act with colorectal surgery. The median follow up of our patients was 16 months (range 1 to 32 months). One year survival was 71 % and 3-year survival was 47 %.

**Conclusion:** Surgical treatment of colorectal cancer metastases in liver is the oncological modality of choice. This procedure is considered to be safe if performed by the well trained surgical team. The selection of patients and the surgical plan are of tremendous importance. This modality of treatment has significantly increased survival and enhanced the effects of postoperative chemotherapy.

P-5

## SURGICAL TREATMENT OF COLORECTAL LIVER METASTASIS AFTER NEOADJUVANT CHEMOTHERAPY

M. Žegarac, S. Nikolic, M. Inic, I. Đurisic, M. Buta, M. Kocic

Institute for Oncology and Radiology, Belgrade, Serbia

**BACKGROUND:** Liver is typical place for metastasis for patients with colorectal carcinoma. During the period of disease, 50% of patients with colorectal carcinoma will get liver metastases, 20% of the will have synchronous and 30% metachronous.

Surgical resection is modality of choice in treatment for liver metastases in colorectal carcinoma. Applying neoadjuvant chemotherapy in patients with colorectal cancer liver metastases, which are primarily nonresectable or potentially resectable, it is possible to transform in resectable state. The goal of treatment is R0 liver resection and putting the patient in the NED stage of disease.

**METHOD:** All patients received protocol for potentially resectable metastases- FOLFOX-Bevacizumab.

The assessment was conducted on the basis of angio CT and NMR.

With all patients liver resection procedures and RFA were applied.

**RESULTS:** During the period from June 2007 to December 2009 in 40 patients with nonresectable or potentially resectable metastases the neoadjuvant HT FOLFOX -Bevacizumab was applied on average for three months. The patients were operated 6 weeks after the last application of Bevacizumab, because of the possibility of intraoperative bleeding. The number of metastases ranged from 1 to 6.

With 17 patients lobar resection was performed, and with 10 patients segmental resection was performed. With another 11 patients metastasectomy was performed, while RFA was performed with 2 patients. 3 years survival is 57, 5%.

**CONCLUSION:** By applying neoadjuvant HT and Bevacizumab with patients suffering from colorectal cancer liver metastases as the only existing metastases, it is possible to significantly reduce metastases, and thereby resection as well. With this approach time without disease and survival are increased.

## INCIDENCE OF ANASTOMOTIC DEHISCENCE AFTER RECTAL RESECTION

B. Trifunović, M. Ignjatović, J. Kršić, D. Milutinović, M. Jovanović, D. Grbović, D. Zeljković, B. Nešković, A. Zarić, S. Micković

Department of General Surgery, Military Medical Academy, Belgrade, Serbia

**BACKGROUND:** Colorectal carcinoma is one of today's most serious and expensive health care problems. In Serbia the year registered about 4,000 new cases of colorectal cancer and by 1500 that number goes to patients with rectal cancer. Primary care of these patients is surgery and the most common and most serious surgical complication was dehiscence of colorectal anastomosis, especially in recent decades when the primacy of the surgical treatment strategy gives sphincter saving procedures.

**METHODS AND METHODS:** Retrospective study included 519 patients with RC underwent elective primary rectal resections between January 1993 and January 2011. 294 patients were male and 225 were female, median age 64- in ranging from 18 to 89. In relation to tumor localization, 81 (15, 6%) patients had tumor of the upper third, 264 (50, 8%) of medium third and 174 (33, 5%) of distal third. In 292 (56,2%) patients we performed protective stoma.

**RESULTS:** We observed 46 (8, 84%) anastomotic leakage. In 10 (1, 91%) anastomotic leakage were the first and the second degree and did not require surgical approach but 36 (6, 92%) patients had anastomotic leakage of third degree and we performed reoperation. Mortality rate was 1.73% and all of them were underwent reoperations.

**CONCLUSION:** Preoperative preparation of the adequate and the adequate surgical technique (good blood supply and length of the proximal colon, bound by the application of a protective stoma in all low resection with TME, required drainage and less blood loss operatively) significantly contribute to reducing the incidence of these complications .

P-7

## VALIDITY OF REVISED BETHESDA GUIDELINES FOR IDENTIFICATION MICROSATELLITE INSTABILITY IN UNSELECTED COLORECTAL CANCERS IN SERBIAN PATIENTS

S. Markovic<sup>1</sup>, J. Antic<sup>1</sup>, I. Dimitrijevic<sup>2</sup>, V. Markovic<sup>2,3</sup>, D. Bojic<sup>1</sup>, P. Svorcan<sup>1</sup>, Z. Krivokapic<sup>2,3</sup>

<sup>1</sup>Zvezdara University Hospital, Belgrade, Serbia

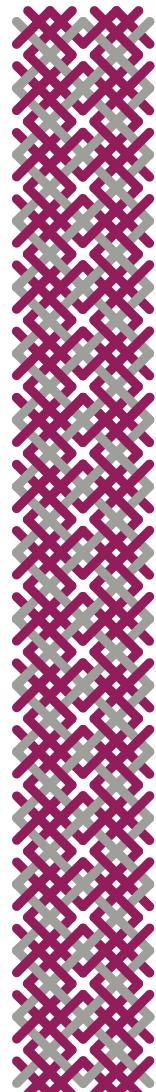
<sup>2</sup> First Surgical Clinic, Clinical Center of Serbia, Belgrade, Serbia

<sup>3</sup>Medical School of Belgrade University, Serbia

**BACKGROUND AND OBJECTIVE:** Identification of colorectal cancers (CRC) with high level of microsatellite instability (MSI-H) is clinically important. The revised Bethesda guidelines (BGrev) were established to identify patients with colorectal cancer (CRC) who should be tested for MSI. Aim of present study was to assess practical accuracy of revised Bethesda guidelines for detection of MSI-H in colorectal cancer. **METHOD:** 150 primary unselected CRCs excised surgically in period 2006-2010. MSI analysis was carried out using a fluorescence-based pentaplex polymerase chain reaction (PCR) technique with five microsatellite markers (BAT25, BAT26, NR-21, NR-22, NR-24). Specimens were histopathologically assessed (independently without pathologist's knowledge about MSI status). Patients were divided into two groups, based on fulfillment BGrev. **RESULTS:** MSI was detected in 15 of 45 patients who had and 4 of 105 patients who did not have criteria of the revised Bethesda guidelines. Sensitivity, specificity, positive and negative predictive values for revised Bethesda guidelines was 78,9%, 77%, 30%, 70%, respectively. Logistic regression analysis confirmed the revised Bethesda guidelines as the most discriminating set of clinical parameters in identification MSI in CRC (odds ratio, 23,5; 95% confidence interval, 7-79; p= 0.001). Using univariate logistic regression analysis we found the strongest association between right-sided CRC, with any mucinous differentiation and MSI. **CONCLUSION:** The revised Bethesda guidelines are useful for selecting patients for MSI testing. Right-sided CRC with any mucinous differentiation often show MSI-H phenotype.

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## P53 AND ITS ISOFORMS IN COLORECTAL CANER

Z. Milićević<sup>1</sup>, Z. Krivokapić<sup>2,3</sup>

<sup>1</sup>Laboratory of Molecular Biology and Endocrinology, “Vinca” Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia

<sup>2</sup>First Surgical Clinic, Clinical Center of Serbia, Belgrade, Serbia

<sup>3</sup>Medical School of Belgrade University, Serbia

The tumor suppressor p53 is mutated, deleted or indirectly inactivated in the majority of human cancers, illustrating its importance as “guardian of the genome”. As p53 pathway inactivation is a common denominator to all cancers, the understanding of p53 tumor suppressor activity is likely to bring us closer to cancer therapy. However, despite all the experimental evidences showing the importance of p53 in preventing carcinogenesis, it is difficult in clinical studies to link p53 status to cancer treatment and clinical outcome. The recent discovery that p53 gene encodes for nine different p53 proteins (isoforms) may have a profound impact on our understanding of p53 tumor suppressor activity. Studies in several tumor types have shown that the nine different p53 isoforms are abnormally expressed in tumor tissues compared to normal cells. p53 protein isoforms modulate p53 transcriptional activity and cell fate outcome in response to stress. Sixty cases of colorectal cancer were screened for the presence of the p53 protein by immunohistochemical and Western blot assay using a polyclonal antiserum CM-1 and monoclonal antibodies Do-7 and Pab240 with multiple anti-p53 specificities. In general, tumor p53 overexpression correlates with a more aggressive tumor phenotype and negative survival prognosis. The isoforms expressed varied between individual tumors indicating potential roles for these p53 variants in colorectal cancer. These new forms have the capacity to modulate the activity of full length p53 and their overexpression in certain tumor types may provide a new explanation as to how the p53 response can be downregulated in tumors which do not have coding region mutations in the p53 gene. While complex this regulation of the p53 activity offers many possibilities for therapeutic modulation and underlines the probability that polymorphisms within the p53 gene and its regulators may be major determinants of population based variations in cancer incidence. Deregulation of p53 isoforms expression may play a role early in tumor formation, as attenuation of the wt p53 response would render the cells more susceptible to further genetic damage and therefore to neoplastic transformation and tumor progression. Following our demonstrations of differential isoform expression in individual colorectal cancers, further studies will be needed to determine the impact of their expression on p53 activities and the relationships between different isoform expression patterns and clinical outcome. Therefore, the tumor p53 status needs to be determined more accurately by integrating p53 isoform expression, functional p53 mutation analysis and a panel of antibodies specific of p53 and of its target genes. To date, no clinical studies have integrated all those p53 parameters to determine p53 status.

## CHARACTERIZATION OF CD54 GLYCOPROTEIN EXPRESSION IN COLORECTAL CANCER

Z. Milićević<sup>1</sup>, Z. Krivokapić<sup>2,3</sup>

<sup>1</sup>Laboratory of Molecular Biology and Endocrinology, “Vinca” Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia

<sup>2</sup>First Surgical Clinic, Clinical Center of Serbia, Belgrade, Serbia

<sup>3</sup>Medical School of Belgrade University, Serbia

Several classes of proteins involved in the tethering of cells to their surroundings in a tissue are altered in cells possessing invasive or metastatic capabilities. The affected proteins include cell-cell adhesion molecules (CAMs) - notably members of the immunoglobulin and calcium-dependent cadherin families, both of which mediate cell-to-cell interactions - and integrins, which link cells to extracellular matrix substrates. Notably, all of these “adherence” interactions convey regulatory signals to the cell. Changes in expression of CAMs in the immunoglobulin superfamily appear to play critical roles in the processes of invasion and metastasis. The precise nature of the genetic changes undergone by tumors during progression in general or in the acquisition of metastatic potential are poorly understood. The binding of mucin 1 to ICAM -1 suggests a potential role of mucin 1-ICAM-1 interaction in the cancer metastasis. An impair glycosylation is known to be a common feature of cancer cells. In particular, alteration of sialic acids present in glycoproteins is associated with cancer cell behavior such as invasiveness and metastasis. The expression of ICAM-1 (CD-54) in colorectal carcinoma was estimated and quantified by immunohistochemistry (APAAP and SABC) on fresh frozen sections and by Western blot analysis using anti ICAM-1 RR 1/1 mAbs specific for the first Ig domain of ICAM-1. We found that the ICAM-1 expression was reduced significantly in metastasizing tumors. Western blot assay indicates that the colorectal cancer cells contain two forms of preprocessed ICAM-1 (78 and 70 kDa). The thin band of approximately 55-60 kDa most likely represented the complete deglycosylated form of ICAM-1. These findings suggested that glycosylation defect is closely associated with the adhesion and migration properties of cancer cells. The ability of ICAM-1 to form homodimers, the expression of isoforms resulting from alternative splicing and the presence of different cell-specific glycosylation patterns could all affect the processing of ICAM-1. The identification of ICAM-1 (CD54) molecules that are differentially expressed in benign and malignant tumors can be an important step towards understanding the biochemical basis for the distinct clinical behavior of these two lesions.

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## TREATING SYNCHRONOUS AND METACHRONOUS ADENOCARCINOMAS OF THE LARGE INTESTINE – OUR EXPERIENCE

M. Cvetanovic, B. Vekic, S. Radibratovic, Z. Zagorac, R. Zivic, M. Kalezic, Z. Jovanovic  
Department of Colorectal Surgery, Clinical Center Dr Dragisa Misovic – Dedinje

**Background:** The synchronous and metachronous development of two or more primary adenocarcinomas explains 3 to 5 % of cases of colorectal cancer. Aim of this study is to show our experience in the management of patients with synchronous and metachronous lesions, and come to conclusions concerning their optimal diagnosis, treatment and follow-up.

**Patients and methods:** Between 2003 and 2008, ten patients (seven men and three women, mean age 69.5 years, range 56-83 years) with synchronous (three patients) and metachronous(seven patients) lesions were treated, comprising 0.4% of all patients submitted to surgery for colorectal cancer. The diagnosis lag for metachronous lesions ranged from 1.5 to 7 years. All three patients with synchronous cancers had two lesions. **Results:** Nine patients conducted staging colonoscopy and abdominal CT while the remaining one underwent only abdominal CT because of his critical condition. Surgery had curative intent in eight patients and palliative in two. The average postoperative stay was 10 days (7-19 days). The postoperative mortality was zero. Patients' survival after curative procedures was 87.5% for the first year, 62.5% for the second, and 60% for the third year. After palliative surgery, survival was 50% for the first year, and 0% for the third.

**Conclusion:** Multiple primary carcinomas often occur in the rectum and colon. The time lag between the first and the second malignant transformation is variable. Two or more primary carcinomas can coexist at the time of diagnosis (synchronous), or develop consequently (metachronous), sometimes years after resection of the first primary. Surgeons must follow up their patients with colorectal cancer regularly after surgery. Follow up aims at early diagnosis and treatment of metachronous lesions that can appear many years after diagnosis of primary lesion. Preoperative colonoscopy is an invaluable diagnostic (biopsy) and staging (exclusion of synchronous lesions, localization of the primary), modality, dictating the surgical approach. Additionally, it contributes to cancer prevention allowing the discovery and removal of small polyps before their transformation. **Keywords:** colorectal cancer, synchronous carcinomas, metachronous carcinomas.

# narandžasti put Vaš put



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## CASE OF LEPTOSUCCIN INDUCED MALIGNANT HYPERHERMIA IN PATIENT WITH RECTAL CANCER

N. Nejković <sup>1</sup>, S. Protić <sup>1</sup>, N. Zarić <sup>2</sup>, Z. Krivokapić <sup>2,3</sup>

<sup>1</sup> Center for anaesthesiology and reanimatology, Clinical center of Serbia

<sup>2</sup> Clinic for digestive surgery - First surgical clinic, Clinical center of Serbia

<sup>3</sup>Medical School of Belgrade University, Serbia

Malignant hyperthermia (MH) is a form of myopathy that is usually triggered by volatile anaesthetics such as halothane, sevoflurane and desflurane and depolarising muscle relaxants such as succinylcholine. Pathologic response in MH include increase in oxygen consumption, increase in endtidal CO<sub>2</sub>, tachycardia, hyperthermia, hyperkalemia and muscle rigidity. Immediate recognition and treatment are crucial to avoid lethal outcome. Molecular genetic testing's have confirmed that ryanodine muscle receptors are responsible for MH. We present a case of leptosuccin induced MH with mild pCO<sub>2</sub> increase (6.3 kPa), elevated body temperature measured with esophageal temperature probe (39.5oC), tachycardia (115 beats/min) and respiratory and metabolic acidosis (pH was 7, 23) in a patient who underwent low anterior resection of the rectum for rectal cancer.

Key words: malignant hyperthermia; ryanodine receptors; leptosuccin

## COMPARATIVE ANALYSIS OF OXIDATIVE STRESS MARKERS IN COLORECTAL CANCER POSTOPERATIVE MATERIAL – THE ROLE IN PROGNOSIS AND TREATMENT

B. Brankovic <sup>1</sup>, G. Stanojevic <sup>1</sup>, I. Stojanovic<sup>2</sup>, A. Veljkovic <sup>2</sup>, M. Nestorovic <sup>1</sup>, D. Petrovic <sup>1</sup>, D. Mihajlovic <sup>1</sup>, V. Pecic <sup>1</sup>, D. Miljkovic<sup>1</sup>, A. Todorovic<sup>2</sup>

<sup>1</sup> Clinic for Surgery, Department for Colorectal surgery, Clinical Centre Nis

<sup>2</sup> Institute of Biochemistry, Faculty of Medicine, University of Nis

Colorectal cancer (CRC) is one of the most common forms of malignancies, contributing significantly to cancer morbidity and mortality. It is one of the leading causes of cancer – related death in the world, the second most common cancer in men and the third most common in women. Studies using human colon cancer cell lines have documented the role of oxidative and nitrosative stress in the development of CRC with conflicting results. The study encompassed 50 patients with colorectal cancer whose cancer tissue, adjacent and healthy colonic mucosa were taken for examination of oxidative stress and antioxidant defense parameters, postoperatively. In both tumor and adjacent tissue, Malondialdehyde (MDA) level was significantly increased ( $12.43 \pm 9.39$ ;  $11.57 \pm 5.56$ , respectively,  $p < 0.001$  for both) in comparison to the healthy mucosa, pointing out the present oxidative stress. Tumor NO<sub>2</sub>+NO<sub>3</sub> concentrations were significantly lower than the values in both adjacent and healthy tissue ( $p < 0.001$ ). Superoxide dismutase (SOD) activity was significantly higher in both tumor ( $0, 56 \pm 0.12$  U/mg prot,  $p < 0.001$ ) and adjacent tissue ( $0, 47 \pm 0.19$ ,  $p < 0.001$ ), compared to the health tissue specimens at the incision margin. The comparative analyses of the results of each individual patient related to their clinical findings suggested that the determination of oxidative stress parameters in postoperative material of patients with CRC could be useful in the estimation of the risk of tumor recurrence and cancer invasive and metastatic capacity, related to the prognosis of the disease and the choice of adjuvant therapy.

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## INTRALUMINAL PRESENTATION OF ENDOMETROID CANCER METASTASIS

J. Šimo, M. Šimek

Clinic of Surgical Oncology, Slovak Medical School, The National Cancer Institute in Bratislava, Slovakia

The authors present a case of female patient with a special occurrence of solitary endometrial cancer metastasis. This woman underwent hysterectomy and bilateral adnexectomy due to endometrial cancer classified as grade 2, FIGO stage IIIC followed by adjuvant radiotherapy. PET CT performed six months later revealed only one active metastasis localized in the ascending colon. Examination of the specimen after right hemicolectomy showed centrifugal spreading of the metastasis from mucosa through the entire colonic wall. After description and analysis of the case, authors provide a systematic review of relevant literature. Intra colic metastatic disease originating from the uterine cancer is a relatively rare condition.

Key words: Intra colic metastasis, Endometrial cancer, rare cancer, PET CT, Surgery

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P-14

## NEOADJUVANT THERAPY IN A GASTRIONTESTINAL STROMAL TUMOR OF THE RECTUM: REPORT OF A CASE

A.M. Sekulić<sup>1</sup>, A. Đikić-Rom<sup>2</sup>, J.Petrović<sup>3</sup>, M. Micev<sup>2,4</sup>, Z. Krivokapić<sup>3,4</sup>

<sup>1</sup>University in Pristina, Medical Faculty-K. Mitrovica, Clinical Centre Pristina-Gracanica

<sup>2</sup>Department of Histopathology, Clinical Centre of Serbia, Belgrade

<sup>3</sup> First Surgical Clinic, Clinical Center of Serbia, Belgrade, Serbia

<sup>4</sup>School of Medicine University in Belgrade

A gastrointestinal stromal tumor (GIST) is defined as a specific c-kit (CD117) or platelet-derived growth factor receptor alpha (PDGFRA) – signaling driven mesenchymal tumor arising from the intestinal cells of Cajal. They are rare and comprise < 1 % of all neoplasms of the gastrointestinal tract. GISTs most commonly occur in the stomach and small intestine and only about 5% of all GISTs originate in the rectum, comprising 0, 1% of all tumors originating in the rectum.

Because GISTs are known to be resistant to conventional chemotherapy and radiotherapy, surgical resection is the mainstay of treatment. The introduction of Imatinib, which is an inhibitor of c-kit tyrosine kinase, has provided a new approach to the treatment of GIST. It blocks the constitutive activity of c-kit, thus stopping tumor cell proliferation.

This report describes a case of effective neoadjuvant therapy for a rectal GIST expressing the c-kit gene, where a low anterior resection was successfully performed, thus preserving the anus. A 59-year-old man visited our hospital due to constipation and was found by digital examination to have a solid mass on the left wall of the rectum. Rectal endoscopy showed an approximately 10-cm submucosal tumor located 1cm above the dentate line. MRI revealed tumor mass of the distal and middle thirds of the rectum with extramural propagations involving m. levator ani on the left side. A biopsy specimen was positive for CD34 and the c-kit gene product, and thus the tumor was diagnosed as GIST with high metastatic risk. We decided to implement Imitinab, 400 mg once daily as a neoadjuvant therapy. During this treatment regimen, he did not experience any side effects. After four months of therapy, control MRI showed a decrease in size of rectal mass. Low anterior rectal resection with colo-anal anastomosis was done. Immunohistochemical examination showed diffuse elements CD117 and CD34 in particular chosen fields. That confirmed scant hypocellular remains within the reduced tumor mass, indicating a strong regression of GIST. He had no evidence of disease for 9 months postoperatively.

Conclusion:Preoperative therapy with Imitinib can be important in downsizing the large rectal GISTs and in reducing the mitotic activity. Because these tumors are in the vicinity of pelvic structures, such as the bladder and the anal sphincter, and given that radical surgery may lead to considerable morbidity, downstaging could change the surgical approach and permit less invasive surgery.

## DEHISCENCE OF STAPLER ANASTOMOSIS IN COLORECTAL SURGERY IN PATIENTS WITH AND WITHOUT PROTECTIVE ILEOSTOMY

J. Đeri, M. Simatovic, J. Ćulum, D. Kostic, V. Keković , G. Janjic , S. Brstilo

Clinic of General and Abdominal Surgery Banjaluka, Banja Luka, Bosnia and Herzegovina

**Introduction.** Dehiscence of anastomosis as described in colorectal surgery is one of the most serious complications with possible death, the rate of anastomotic dehiscence in the rectum are between 12-19%. Creating a protective ileostomy has an important role dehiscence in the prevention of complications as dehiscence. The aim of this study is to show the incidence of anastomotic dehiscence in colorectal surgery, then the importance of protective ileostomy in the prevention of complications and anastomotic dehiscence.

**Methodology.** The survey was conducted at the Department of General and Abdominal Surgery in Banja Luka. Study included 87 surgically treated patients diagnosed with low colon cancer were divided into two groups for 31 groups. A patient after surgery, a protective ileostomy, and other B group were 56 patients without a protective ileostomy after surgery. All patients were followed by postoperative course and possible complications.

**Results.** Obtained results showed that the total number of patients with anastomotic leak was 9.1%. In group A dehiscence occurred in 2 of patients (6.4%) and in group B in 6 of patients (10.7%).Include total number of patients in the study, one patient had a fatal outcome.

**Conclusion.** This study showed that frequency colorectal anastomosis dehiscence in the average of the reference institutions. Also this study showed that the incidence of anastomotic complications and weight increased in patients with colorectal anastomosis is created in which protective ileostomy.

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## THE “MODERN” TECHNIQUE OF ABDOMINOPERINEAL RESECTION OF THE RECTUM IS IN FACT SO OLD

S. Neagu

University Emergency Hospital, UMF Bucharest, Bucharest, Romania

The “Modern” technique of abdominoperineal resection described by F. Mouvais et al. in Journal de Chirurgie Visceral vol. 148, nr. 2, 2011, considered essential to performe a cylindric excision and the TME after Heald. The schema of cylindrical excision of the rectum is the same with that published by Victor Pauchet in 1931 in Paris, after Miles. An earlier description of the APR is made by Quenu at the XII French Congress of Surgery, Paris 17-24 oct 1898. A similar technique is described by M. Guibe and Jean Quenu in “Chirurgie de l’abdomen” Masson Ed., Paris 1930, and by John Bruce and Robert Walmsley in “Beesley and Johnston’s Manual of Surgical Anatomy”, Oxford University Press, 1939. So that the “modern technique” of abdominoperineal resection is realy old indeed. Conclusion. We must not forget our history of surgery.

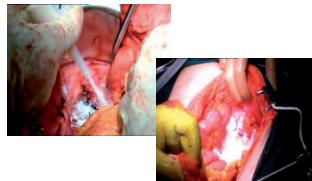
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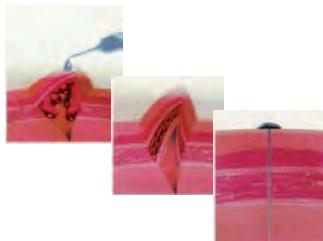
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## LONG-TERM VERSUS SHORT-TERM NEOADJUVANT TREATMENT FOR PATIENTS WITH LOCALLY ADVANCED RECTAL CANCER IN THE LOWER TWO THIRDS OF RECTUM

U. Marolt, M. Koželj, B. Krebs

Department for abdominal surgery, UKC Maribor, Slovenia

**Background.** Neoadjuvant cancer therapy, which is further subdivided in neoadjuvant short-course radiotherapy and long-course chemoradiation, has been recommended as standard treatment for locally advanced rectal cancer (stage II/III). Most of the major randomized trials in neoadjuvant therapy, conducted between the years 1980 and 2005 have concluded that neoadjuvant therapy improves local control rate and the possibility of sphincter preservation in greater extent, than with surgery alone or surgery and adjuvant therapy.

**Patients and Methods.** All patients with local advanced rectal adenocarcinoma in the lower 2/3 of the rectum (cT3-4 or cN+), which has been identified by endorectal ultrasonography, computer tomography or magnetic resonance image, who underwent an operation in our institution between 1 January 2000 and 31 December 2009 and had been treated with neoadjuvant therapy, were identified. Furthermore, the dates were retrospective analyzed for anastomotic leakage (AL), local recurrence rate (LR), distant metastasis (DM), disease free survival (DFS) and overall survival (OS) in the groups of patients receiving neoadjuvant short-course radiotherapy and long-course chemoradiation. Patients over 80 years old and with ASA more than 4 were excluded from the study.

**Results.** In the period from 2000 till 2009, we have operated on 689 patients, from which 155 meet the inclusion criteria (22,5%). Out of all included patients, 31 (20%) received neoadjuvant short-course radiotherapy and 134 (80%) long-course chemoradiation. In the group with short-course therapy 18/31 patients had died and in the other group 51/134 had died due to the progress of the disease.

**Conclusions.** The number of studies, which compared short-course radiotherapy and long-course chemoradiation is limited. Results could not substantiate any differences between the types of neoadjuvant therapy used and the LR. Furthermore no impact on OS could be observed.

## PROTECTIVE STOMA TYPE AND TIMING OF STOMA CLOSURE FOLLOWING LOW ANTERIOR RECTAL RESECTION DO NOT INFLUENCE THE RATE OF COMPLICATIONS: RETROSPECTIVE STUDY

M. Koželj, B. Krebs, N. Kavčič

Department for abdominal surgery, UKC Maribor, Slovenia

**Background:** Anastomotic insufficiency is a serious complication of low rectal cancer resection. A protective stoma reduces the rate of anastomotic leakage requiring surgical intervention; however there is no consensus in the literature which type of stoma is preferable, and when to close it.

**Aim:** We designed a retrospective study to determine the rate and type of complications after diverting stoma closure, whether loop ileostomy versus loop colostomy had any different complication rate, whether the timing of stoma closure correlates with the rate of complications.

**Patients and methods:** During the period between 1. January 2001 and 31. December 2009 we performed diverting stoma closure in 129 patients that had low anterior rectal resection because of cancer. The anastomoses were created at 8 cm or smaller distance to the dentate line and were protected by loop ileostomy or loop colostomy.

**Results:** There were 81 patient with ileostomy and 46 patients with transversostomy. We found no statistical difference in complication rate regarding patient age, sex, type of stoma and time of diverting stoma closure. The mean time between rectal resection and stoma closure was 195 days.

**Conclusion:** Stoma type, timing of stoma closure and patient age do not influence the rate of complications.

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## COMPARATIVE STUDY OF A COLON EPITHELIUM TISSUE BY IR SPECTROSCOPY AND OPTO-MAGNETIC SPECTROSCOPY

A. Dragicevic<sup>1</sup>, Đ. Koruga<sup>1</sup>, I. Dimitrijevic<sup>2</sup>, V. Marković<sup>2</sup>, Z. Krivokapic<sup>2,3</sup>, L. Matija<sup>1</sup>

<sup>1</sup>Biomedical Engineering, Faculty of Mechanical Engineering, Faculty of Belgrade, Belgrade, Serbia

<sup>2</sup>First Surgical Clinic, Clinical Center of Serbia, Belgrade, Serbia

<sup>3</sup>School of Medicine University in Belgrade

According to epidemiological data, colorectal carcinoma is the most frequent malignant tumor of gastrointestinal tract, and is the second cause that increase incidence of colorectal carcinoma in Serbia, (now 46/100.000). Since colorectal carcinoma belongs to the group of cancer originating in epithelium and based on the results in previous studies where opto-magnetic spectroscopy (OMS) and IR spectroscopy were used for characterization of PAP smears, this study was preformed to introduce opto-magnetic method as a new method for early detection of colorectal cancer. In this study OMS and IR spectroscopy are used for detecting differences between normal and pathological tissue. Investigation has included 50 patients with adenocarcinoma. Digital images of healthy mucous and tumor infected tissues were taken under the white light and reflected polarized light, ten times each and were processed with spectral convolution algorithm according to OMS method. Also, same samples were measured by IR spectroscopy. Preliminary results obtained by OMS and IR spectroscopy were compared to results obtained by histopathology and significant correlation has been indicated. It is shown that OMS method can detect difference between normal and pathological tissue.



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## RECONSTRUCTION OF ANAL SPHINCTER INJURY DURING CHILDBIRTH - A PERSONAL EXPERIENCE

M. Stošić

General Hospital Vranje, Vranje, Serbia

**Abstract:** The background and purpose of the study: The most common cause of fecal incontinence is a rupture during childbirth. The aim of the present paper is to give a contribution to the questions: when, in which moment and in which way to deal with such cases.

**Methods:** With the retrospective 5-year analysis of personal experience the author presents 10 cases of acute repaired fecal incontinences during childbirth. At the same time describes the technique used and compares it with relevant literature data. **Results:** During 5-year period a surgeon on duty was invited 10 times because of the anal sphincter rupture during childbirth in various degrees. In all cases the operation was done on the gynecological ward, as relatively urgent and immediate postoperative results were always subjectively satisfactory.

**Conclusions:** If there is not severe destruction of anal-muscle sphincter that makes possible recognition of structures – urgent reparation of anal sphincter gives excellent results, regardless which method of reparation is used.

**Key words:** fecal incontinence, childbirth, anal trauma.

## RADICAL RETROPUBLIC PROSTATECTOMY, ABDOMINOPERINEAL EXCISION OF THE RECTUM AND BLADDER-SPARING PROCEDURE FOR LOCALLY INVASIVE RECTAL CANCER

M. Pavlov, M. Ceranic, P. Kovacevic, S. Latincic, D. Savic, D. Kecmanovic

Clinic for Digestive Surgery - First surgical clinic, Clinical Center of Serbia, Belgrade, Serbia

In patients with advanced rectal cancer which affect the prostate and seminal vesicles is not always necessary to do a total pelvic exenteration, because we can perform en bloc abdominoperineal resection with radical retropubic prostatectomy and resection of the seminal vesicle. In these patients it is necessary to conduct preoperative radiohemotherapy and then to perform en bloc resection of the rectum, prostate and seminal vesicle with preservation of the bladder and of course, with negative surgical margins.

One patient with advanced primary rectal cancer involving the prostate or seminal vesicles underwent bladder-sparing extended colorectal abdominoperineal resection with radical prostatectomy and cysto-urethral anastomosis (CUA). There was morbidity. After a median follow-up period of 38 months there was no sign of local recurrence. Patient had satisfactory voiding function after CUA. These bladder-sparing procedures are good alternatives in selected patients with advanced rectal cancer involving the prostate or seminal vesicles.

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G. Tosovic, M. Stanojevic, V. Stojadinovic, V. Varnicic, D. Jezdic, T. Porubovic, S. Obucina, V. Burzanovic

Department of Digestive Surgery, General Hospital Uzice, Uzice, Serbia

**Background/Aim:** Abdominal sepsis is still a major problem in abdominal surgery, regardless of etiology. The treatment is very complex and expensive and the outcome is always uncertain. In this study we wanted to objectify the observation that the formation of ileostomy in “critical” patients often had success in survival.

**Material and Methods:** This retrospective study included 216 patients who have developed abdominal sepsis, treated in our department from 2001 to 2011(anastomotic leak, tumor perforation, toxic megacolon, diverticulosis perforation, perforated appendicitis with diffuse peritonitis, severe forms of pancreatitis...). Patients were divided into two groups: GROUP A: in which is formed ileostomy; GROUP B: in which it is not formed. They were also divided according to etiology, gender and age.

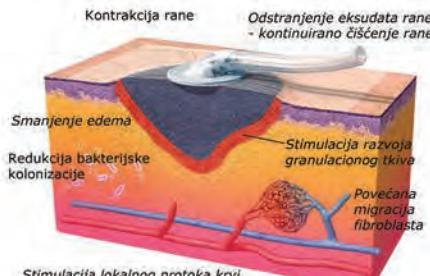
**Results:** In group A, there were 103 patients (52 males, 49 females), aged 18 to 86 years. Eight (8) patients died. In group B, there were 113 patients (61 male, 52 female), aged 18 to 90 years. Twenty-seven (27) patients died. Average hospital stay in group A was 22 days (18-43 days). Average hospital stay in group B was 36 days (12-79 days).

**Conclusion:** According to our study in patients with severe abdominal sepsis in whom ileostomy was formed, the chances of survival are much greater than in patients in whom it was not. Also, hospital stay was significantly shorter.

**Keywords:** ileostomy, abdominal sepsis, survival

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## EARLY EXPERIENCE WITH THE COMPRESSION ANASTOMOSIS RING (CAR™ 27) IN RECTAL RESECTION

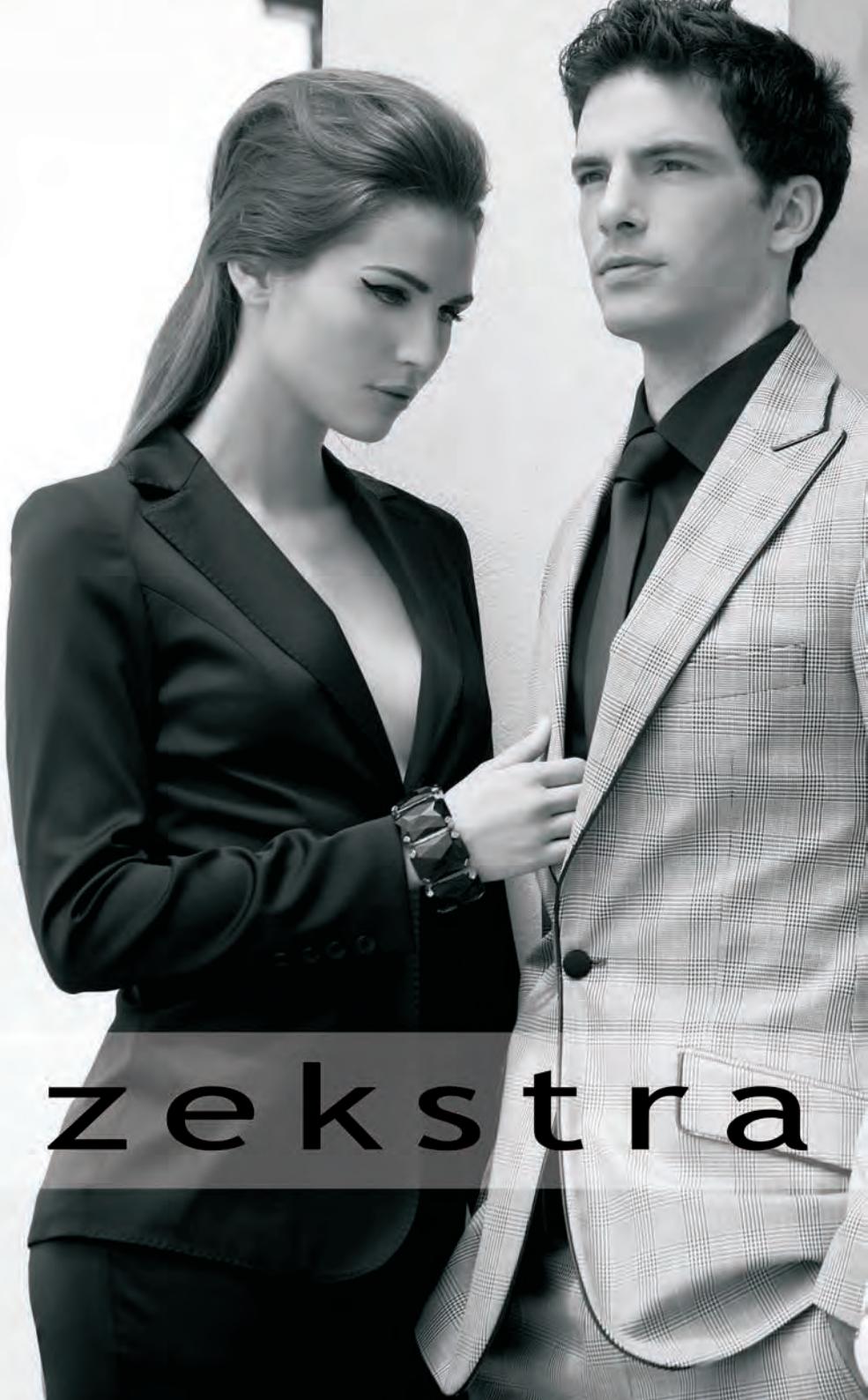
G. Stanojevic

Clinic for General Surgery Clinical Center Nis

**Aim:** The aims of the current study were to present early clinical experience of the CAR™ 27 device in colorectal end-to-end anastomosis after high and low anterior resection, and to evaluate the safety, efficacy, and technical feasibility of the device. **Methods:** A non-randomized prospective data collection was performed for patients undergoing a high and low anterior resection due to cancer of the rectum. Eligibility criteria of the use of the CAR™ 27 were anastomoses between the colon and the rectum. The primary short-term clinical endpoint, rate of anastomotic leakage, and other clinical outcomes, including intra- and postoperative complications, length of operation time and hospital stay, and the ring elimination time were evaluated.

**Results:** A total of 15 patients (male/female ratio 13/2; median age 64, 8 years) underwent an elective high and low anterior resection, followed by an anastomosis using the CAR™ 27. Colectomy was performed through laparotomy in all patients. There were 8 (53,3%) patients with high anterior and 7 (46,7%) patients with low anterior resection. All low anterior resections were diverted with “loop”ileostomy. There was no surgical mortality. As an intraoperative complication, total disruption of the anastomosis occurred by premature enforced tension on the proximal segment of the anastomosis in one patient. The ring was removed and another new CAR™ 27 anastomosis was constructed. One patient with high anterior resection showed postoperative anastomotic leakage after 6 d postoperatively and conservatively treated. Mean expulsion time was 11.0 days. Exact date of expulsion of the ring could not be recorded in four patients (26%) who did not notice expulsion of the ring. N! o patients manifested clinical symptoms of anastomotic stricture.

In conclusion, short-term evaluation of the CAR™ 27 anastomosis in patients undergoing high and low elective open anterior resection proved to be a safe and efficacious alternative to the standard hand-sewn or stapling technique. Along with its technical superiorities, a prospective large-scale clinical trial would confirm the validity of the CAR™ 27 in diverse clinical settings.



zekstra

**ACUTE ABDOMEN DUE TO SIGMOID AND CAECAL-ASCENDING COLON VOLVULUS**

C. Avgoustou, A. Tsakpini, Ch. Belegris, S. Fountas, A. Papazoglou, I. Nika

General Hospital of Nea Ionia “Constantopoulion - Aghia Olga”, Athens – Greece

Sigmoid and caecal-ascending volvulus are special forms of intestinal obstruction. Twenty-two patients with acute abdomen due to strangulating intestinal obstruction caused by sigmoid volvulus (20 cases) or caecal-ascending colon volvulus (2 cases) were treated during 3/2000-6/2012. In 18 of them, 17 with sigmoid volvulus and one with caecal-ascending colon volvulus (11 females, 7 males, 24-84 years), obstruction was fulminating and diagnosis was based on severity of clinical symptoms, physical examination and specific findings on plain x-rays and, computed tomography. Excessive abdominal distension with pain and shock were present in all 18 patients and bowel sounds were absent in 11. The last 4 patients, having had initially the subacute form of sigmoid (3) or caecal (1) volvulus, had a coexistent hemi-obstructive sigmoid carcinoma (male 85 years), a markedly redundant sigmoid (females 80 and 82 years with mental disease) or a freely movable caecum (female 45 years) as indicated by gastrographin study and sigmoidoscopy. All patients – including the last 4 who finally had the acute form of sigmoid or caecal volvulus – were operated on within 10 hours from admission. All patients with sigmoid volvulus underwent sigmoidectomy for gangrenous sigmoid, with the one with carcinoma having oncologic resection. Eight of them had double-barrel colostomy with hemianastomosis, 7 Hartmann's procedure and 5 primary colorectal anastomosis (included the one with carcinoma). The patients with caecal-ascending colon volvulus underwent right hemicolectomy with ileotransverse anastomosis. One patient suffering from chronic tetraplegia and having satisfactory recovery after Hartmann's operation died on 12th day of pulmonary embolism. Another patient (female with sigmoid volvulus, 86 years) failed to recover from multiorgan failure and died on 8th day. Minor complications occurred in 10 patients. The mean hospitalization for survivors was 8.2 days. Colostomies were closed at 3-4 months. Acute sigmoid and caecal-ascending colon volvulus with strangulating obstruction requires emergency excision.

P-25

## SURGICAL TREATMENT OF CHRONIC GLUTEAL HIDRADENITIS SUPPURATIVA

S. Bilali, V. Todi, A. Mitrushi, I. Pano, V. Bilali, J. Habibaj

University Hospital Center “Mother Teresa”, Tirana, Albania

**Introduction:** Verneuil’s disease or perianal hidradenitis suppurativa (HS) is a chronic suppurative disease with a tendency to sinus formation, fibrosis and sclerosis and with a great impact on quality of life. HS affect the apocrine sweat glands or sebaceous glands and may arise on each of the localizations where apocrine glands are prominent: axilla, breast aureole, umbilicus, perineum, groin, buttocks. We present here our experience on moderate hidradenitis suppurativa cases, with our treatment methods and outcomes.

**Methods:** A retrospective review of six patients’ medical records from January 2001 to December 2010.

**Results:** Six patients underwent treatment for HS in gluteal areas with surgical excision. Five patients were male (83%). Median age was 42.5. We performed 9 operations in total on these patients. In 3 patients the wound was left open for secondary healing and the mean time for complete wound heals was 11.3 weeks in this group (9.5-19 weeks). Delayed skin grafting was utilized in two patients in whom the wounds had been left open after the first operation. In this group complete wound healing took two months in total. One patient underwent primary wound closure using rotation flaps with 2 weeks complete healing time. Successful treatment, without recurrence, was accomplished in 83.3% of the cases.

**Conclusion:** Local excision followed by primary closure is a valuable treatment for patients with mild to moderate HS with low morbidity and a high patient satisfaction rate. Management of the wound after wide excision should be tailored to the individual patient.

## LAPAROSTOMY AFTER A RADICAL CYSTECTOMY DUE TO INVASIVE UROTHELIAL SARCOMATOID CARCINOMA OF THE BLADDER - CASE REPORT

M. Sofronievska-Glavinev, S. Ristovski, Z. Jovanovska-Spasova

University Surgical Hospital St. Naum Ohridski, Skopje, Macedonia

We report a 55 years old patient presenting with gross hematuria and bilateral hydronephrosis, afterwards diagnosed tumor of the bladder that was an indication for transurethral resection of the tumor. Histological examination revealed infiltrative bladder tumor which contains both epithelial and stromal components. After a month the patient underwent a radical cystoprostatectomy and ileal conduit operation as well as pelvic lymph node dissection. The histologic examination of the specimen revealed tumor polymorphism but with sarcomatoid predomination, invading the prostate and the perivesical fat tissue. Patient felt fine after the operation and after 3 weeks was dismissed from the hospital. One month later he was readmitted due to high temperature, raised white blood count up to  $35 \times 10^9$  and anemia. Abdominal CT was performed showing intraabdominal collection that was indication for explorative laparotomy. During a surgical intervention a large collection of pus and several small intestinal perforations were found. The collection was evacuated and the perforations were sutured, extensive lavage of the peritoneal cavity was done and the laparostomy was left. We tend to close the abdomen after 3 days so we continued everyday lavage of the abdomen and administration of high dose of the antibiotics, correction of the protein status and blood transfusion. Unfortunately patient died before the laparostomy was closed due to multi organ failure. Sarcomatoid carcinoma of the bladder is very aggressive and lethal tumor with very poor prognosis that requires more vigorous treatment protocols.



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## SINCHRONOUS TUMORS OF BLADDER AND COLON- CASE REPORT

S. Ristovski, M. Sofronievska-Glavino

University Surgical Hospital St. Naum Ohridski, Skopje, Macedonia

The occurrence of synchronous tumors deriving from different embryogenic tissues and without clear correlation with a common etiopathogenetic factor is very unusual. More unusual is when the presentation of the synchronous tumors goes with poor symptoms. The aim of this paper is to present a patient who was primarily operated because of the tumor of the bladder, diagnosed by clinical findings of painless gross haematuria, CT imaging of urinary tract and cystoscopy. Transurethral resection of the bladder tumor was done primarily and the histological finding showed superficial transitional cell carcinoma (2nd grade). Intravesical instillation of BCG was done, but after 2 months a second TUR was indicated because of the tumor recurrence. The second TUR was done but after a week explorative laparotomy due to rectovesical fistula was performed. The intraoperative finding was penetrating tumor of the sigmoid colon into a bladder and two more sigmoid tumors distally. Radical cystectomy and Hartman procedure were performed with implantation of both ureters in the colostomy. The histological findings showed three adenocarcinomas of the sigmoid colon one of which invading, penetrating and perforating the bladder wall. This is a rare case of patient presenting only urological symptoms (painless gross haematuria) without any of expected colon symptoms which changes and masks the real clinical picture and the way of diagnosis and treatment.

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## EARLY PREDICTION OF ANASTOMOTIC LEAKAGE AFTER OPEN COLORECTAL RESECTIONS

M. Scepanovic, B. Kovacevic, V. Cijan, A. Antic, Z. Petrovic, R. Asceric, I. Krdzic, V. Cuk

University Clinical Centre Zvezdara, Belgrade, Zvezdara

**Purpose:** Anastomotic leakage (AL) is a serious complication following colorectal surgery. In current surgical practice significant number of patients who undergo colorectal surgery are discharged early. An early prediction of AL could avoid readmission and decrease morbidity. C-reactive protein (CRP), due to its relatively short half-life, was shown to have high predictive value in anastomotic leakage occurrence.

**Methods:** Between May 2010 and January 2012, 123 patients who underwent elective colorectal surgery with primary anastomosis at University Clinical Centre Zvezdara were included in this prospective study. CRP, white blood cells count (WBC) and body temperature (BT) was recorded daily until postoperative day 7. Diagnostic accuracy of CRP, WBC and BT in AL prediction was assessed by ROC curve analysis.

**Results:** 10 patients developed AL at a mean of ninth postoperative day. CRP was significantly higher every day during 7 postoperative days in AL group compared to group of patients without leakage, whereas WBC and BT were not. A cutoff of value of 134.5 mg/l in the level of C-reactive protein at postoperative day 3 showed a sensitivity of 70%, specificity of 75% and a negative predictive value of 96.5% for the detection of anastomotic leakage.

**Conclusions:** Patients with CRP values < 134.5 mg/l on the third postoperative day could be safely discharge from hospital earlier. Contrary, patients with higher values require prolonged hospitalization and intensive search for infective complications, particularly AL.

## NEUTROPENIC COLITIS AFTER TREATMENT OF ACUTE MYELOID LEUKEMIA WITH CYTOSINE ARABINOSIDE AND DAUNOMYCIN

N. Čolović <sup>1, 2</sup>, D. Tomin <sup>1, 2</sup>, A. Vidović <sup>1, 2</sup>, G. Janković <sup>1, 2</sup>, N. Suvajdžić <sup>1, 2</sup>, I. Djunić <sup>1</sup>, V. Djurašinović<sup>1</sup>, M. Virijević <sup>1</sup>, M. Čolović <sup>2</sup>

<sup>1</sup> Clinic of Hematology, Clinical Center of Serbia, Belgrade

<sup>2</sup> School of Medicine, University of Belgrade, Serbia

**Introduction.** In this report we focus on the importance of an accurate diagnosis of gastrointestinal complications during chemotherapy for acute myeloid leukemia. The leukemic infiltration of the digestive system may cause mucosal ulcers which can lead to bleeding or perforation. The immune system deficiency in this cohort of patients may result in necrotic enterocolitis (leukemic typhlitis), perianal inflammation, abscesses, and peritonitis.

**Patients and results:** Retrospective review of medical documentation of 37 patients with acute leukemia and neutropenic enterocolitis recorded on Clinic of hematology during the four year period (2005-2009). AML M2 was diagnosed in 16 patients, 2 patients had hypoplastic type of AML, 15 patients AML M4, and 4 patients AML M5.

All 37 patients with neutropenic enterocolitis received chemotherapy according to protocol MRC AML12. 11 patients had unfavorable karyotype. Seven patients had a complex chromosomal abnormalities (more than 3 chromosomal aberrations in more than 2 mitoses), and in four cases monosomal karyotype was registered. At the time of gastrointestinal difficulties all patients were in neutropenic phase ( $WBC < 0.5 \times 10^9/l > 0.1 \times 10^9/l$ ) after receiving induction chemotherapy with daunorubicin Daunorubicin 45mg/m<sup>2</sup> (1, 3, 5 days) +cytostine arabinoside 100 mg/m<sup>2</sup>/12h (1to 7 day).

For the final diagnosis relevant finding was cecal or ascedent colon wall thickening larger than 5 mm, verified by ultrasonography in all patients. Abnormal findings also included dilated bowel loops (19 patients), air fluid levels (9 patients), dumb – printing (7 patients) and pneumatosis intestinalis (5 patients). All patients were managed with conservative treatment with broad spectrum antibiotic coverage combined with bowel rest, nasogastric suction and total parenteral nutrition. The antibiotic regimens consisted of vancomycin in combination with carbapenem and metronidasole and in combination of cefepime with metronidazole.

Twenty-five patients has recovered with just medical treatment after mean time period of 17.5 days and returned to normal diet. But only 14 of these patients have achieved a complete remission of the acute leukemia.

Only two patients were managed surgically. Nine patients died because of neutropenic enterocolitis. Lethal end was the consequence of paralytic ileus (4 patients), mechanical ileus (3 patients) and peritonitis with perforation (2 patients).

**Summary.** We emphasize the importance of collaboration between the hematologist and the surgeon in monitoring gastrointestinal complications during and after chemotherapy for acute leukemia and diagnostic value of abdominal ultrasonography evaluation.

P-30

## PRIMARY DIFFUSE LARGE B CELL NON-HODGKIN LYMPHOMA OF THE COLON

N. Čolović<sup>1</sup>, M. Janković<sup>1</sup>, M. Plebic<sup>2</sup>, V. Plebic<sup>2</sup>, M. Jovanovic<sup>2</sup>, V. Krstovski<sup>2</sup>, M. Čolović<sup>1</sup>

<sup>1</sup>Medical Faculty, University Belgrade, <sup>2</sup>Medical Center Valjevo

Introduction. Primary Non-Hodgkin's lymphoma (NHL) of the colon is a rare tumor of gastrointestinal tract that comprises 0.2-1.2% of all colonic malignancies. The ileocecal part of the bowel is mostly affected. Due to small number of published cases, the optimal therapy for NHL of the colon is not still determined, particularly regarding the necessity of surgical resection and the duration of chemotherapy.

Case 1. A 65-year old woman presented in June 2009. with intermittent diarrhea followed by constipation and loss 20 kg in weight for the last 4-5 months. Laboratory showed hypochromic anaemia. Computed tomography (CT) showed tumor mass 9.5x8x8.6 cm in diameters in the right abdomen. Colonoscopy was inconclusive. Barium enema showed a long of stricture with mucosal irregularity of ascending colon and right side of transverse colon suggestive to malignancy. The patient was submitted to right colectomy on 24.12.2009 with uneventful recovery. Histology and immunohistochemistry of the tumor mass showed plenty of large cells and diffuse growth corresponding to diffuse large B cell lymphoma expressing CD20+, CD79alpha+, CD43+/-, MUM-1+, bcl-2+, cyclinD1-, CD3-, CD5-, CD10-, CD23- and Ki-67 positivity in over 70% of tumor cells. The patient was in stage IIE of the disease. Immunochemotherapy according to protocol R-CHOP (mabthera 700 mg, 1 day, cyclophosphamide 1400 mg , 1 day, adriblastin 90 mg i.v., 1 day, oncovin 2 mg i.v. 1 day, prednison 100 mg daily, from day 1 to day 5 was applied. She received 8 cycles of immunochemotherapy after which systemic investigation, including bone marrow biopsy, computed tomography scan of the chest, abdomen, and pelvis were normal so that it was concluded that complete remission was achieved.

Case 2. A 50-year-old woman in 2008. had been admitted on a surgical ward because of ileus. Right hemicolectomy and terminal ileostoma has been performed. At the operation was resected part of coecum and part of ascending colon length of 150mm with part of ileum length of 95 mm has been removed. Histopathology and immunohistochemistry showed a tumor tissue composed of large, round cells with oval or intended nucleus. Cytoplasm was abundant, partly basophilic and partly bright. Tumor cells expressed CD20+, Cd79alpha+, CD3-, CD5-, bcl-2+/-, bcl-6-, MUM +/-, CD 138+, Ki-67+ in about 70% of tumor cells. Abdominal CT showed a mass of paracaval enlarged lymph nodes 56x42x60 mm in diameter. Biopsy of bone marrow was normal. Laboratory analyses Hb 106 g/l, WBC 6,1x10<sup>9</sup>/l, platelets 342 x10<sup>9</sup>/l, (seg 73%, eo 5%, bas 1%, lym 14%, mo 7%). SE 30 mm, fibrinogen 6,5 g/l, The detail staging examination determined that patient was in stage IIE of the disease. Immunochemotherapy according to protocol R-CHOP was applied. She received 8 cycles of immunochemotherapy after which systemic investigation, including bone marrow biopsy, computed tomographic scan of the chest, abdomen, and pelvis were normal. She is in complete remission since then.

Conclusion. In most published cases as well as in our patient a combined surgical and immunochemotherapy treatment of NHL offered a favorable results so that a proper histology and immunohistochemistry diagnosis is of paramount importance.

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## DELAYED PERFORATION OF THE SIGMOID COLON AFTER BLUNT ABDOMINAL TRAUMA IN A PATIENT WITH MULTIPLE INJURIES - A CASE REPORT

S. Arandjelović

Department of Surgery Clinical Hospital Centre Pristhine in Gacanica and Medical Faculty University of Prishtine in K.Mitrovica

**Introduction:** Blunt abdominal trauma and delayed colon perforations are not common and usually occur in patients sustaining other injuries, but also as isolated event.

**Objectives:** To determine the cause, presentation, anatomical distribution, diagnostic method, management and outcome of intestinal injuries from blunt abdominal trauma.

**Methods:** A retrospective study was conducted and the patients were analyzed with respect, associated injuries, treatment and mortality.

**Case presentation:** A 54-year-old man with sigmoid colon injury was admitted to our emergency department after sustaining blunt abdominal trauma. Patient admitted to the ICU with injuries sustained when he fell the tree in the landscape of the head and body. Suffered an injury in the head and abdomen when the tree fell on his head and in the left area abdominal. Wounds left parietal diameter 30 x5mm and supraorbital in the left frontal region 20x5 mm diameter. Abdomen soft, painful sensitivity to palpation in the left area inguinal and left paracolic, left area lumbar and landscape. On admission, clinically tested, laboratory, X-ray. Free peritoneal air was present on plain abdominal and chest radiography. Aero liquid level in the right hemiabdomen. Set the indication for surgery, which was performed after a short preparation in terms OETA which was filed well. Operative intervention is indicated. Operation duly passed. Operative findings: Lower median laparotomy abdominal cavity was opened. Make the base and powder adhaesiolysis et resectio Maioris partialis. Exploration verify the abdominal cavity opening in the region of perforated sigmoid colon diameter 10x10 mm, from which emphasizes fecal content in the free peritoneal cavity. In the left paracolic spaces and cavum Douglas is a collection of content fecal and fibropurulent be evacuated and rinsed with warm saline. In the area of the terminal ileum is verified diverticulum Meckely diameter 60 x 30 mm. Proximal are two beaches contusion and hematoma in the wall of the terminal ileum diameter 50 x 30 mm. Do deliberation and exteriorisatio gyrus sygmoide colon with colon wall perforation location and perform sigmoid loop colostomy. Our patient was discharged on post-operative day seven without any problems.

**Discussion:** An abdominal contusion is the most likely causal factor in this case. Compression of the sigmoid colon between the abdominal wall and the promontory of the pelvis is the most possible explanation. An overlooked bowel injury is very dangerous because of its tremendous infectious potential. Delayed presentation or large leakage of bowel contents into the peritoneal cavity results in increased morbidity.

**Conclusion:** Early recognition of intestinal injuries from blunt abdominal trauma is difficult, it is very important due to its tremendous infectious potential. Intestinal perforations are often associated with severe injuries which are probably be the determining factors in survival. Surgical abdominal exploration revealed gross fecal contamination and a perforation site. Intra-abdominal irrigation and a sigmoid loop colostomy were performed. To conclude, early diagnosis and treatment are of outmost importance.

## LAPAROSCOPIC RIGHT COLECTOMY HAND ASSISTED FOR VOLUMINOUS POLYP OF THE ASCENDING COLON

I. Ilić, V. Potkonjak

General hospital Kotor, Kotor, Montenegro

Laparoscopic resection of colorectal polyps is a safe and minimally invasive technique for the management of colorectal tumors. Thus, the laparoscopic approach to endoscopically not resectable polyps with suspicion of malignancy enriches the therapeutic options. The purpose of the video is to show the right colectomy technique for an ascending colon polyp with a possible malignancy disease. An oncological resection is therefore offered.

## EXPERIENCE IN IATROGENIC COLONIC PERFORATION CAUSED BY COLONOSCOPY - CASE REPORT

S. Arandjelović

Department of Surgery, Clinical Medical Center, Pristhine in Gracanica and Medical Faculty Pristhine in K.Mitrovica

**Introduction:** Colonoscopy is one of the standard diagnostic or therapeutic procedures for dealing with colonic lesions. Perforation colon is the most serious and the most feared adverse outcome. The incidence of iatrogenic perforation caused by colonoscopic procedures is low.

**Methods:** A retrospective study of patient records was performed for patient with iatrogenic colonic perforation caused by colonoscopy in Clinical Medical Center, Pristhine in Gracanica.

The patients' demographic data, clinical characteristics, management and result were recorded.

**Case presentation:** We reviewed our experience of colonic perforations caused by colonoscopy. Perforations involved occurred during diagnostic colonoscopy. There were women with a age of 73 years. She was admitted because of abdominal pain occurred after colonoscopy review.

Patients had major abdominal operations: Hartmanns procedura follow-up for colonic carcinoma. Hartmann's procedure = Resection of the rectosigmoid colon with closure of the rectal stump and colostomy for previous carcinoma. Colonoscopy: If the appliance was introduced 20 cm. Further placement of the device into the abdominal cavity. Obs. Perforation colonic. She was admitted to the hospital because of abdominal pain and bloating resulting from the colonoscopy review, which was done on the same day. Abdomen above the chest, meteoristic. Signs of peritonitis were found

2 h after colonoscopy There are a defens musculaire abdominal wall. An upright X-ray showed that air had accumulated in the subphrenic area. On Rtg native evident in the standing abdominal pneumoperitoneum. Indication for intervention derived at OETA. This patient was given operative treatment. Patients underwent a laparotomy. Operative findings: Right paramedial cut open the abdomen. Adhesion massive curving thin hose. Exploration verify the perforated hole in the area of the postero-superior wall of colon sigmoid 200 mm proximal to the sygmoidostomy 20x25 mm in diameter, from which fecal content. Do all snakes are adhaesiolysis intestinal tract and colon perforation of primary repair with suttura sygmoid in two layers. Drain in cavum Douglas and left subfreni. The suture wounds. For patient with perforation, the hospital stay was 10 days.

**Discussion:** In 1996, Waye et al. reviewed all of the published reports and found that 165 perforations occurred in 99,359 patients for a rate of 0.17%. In spite of the shortcomings of the previous reports, our results for perforation (0.04%) were strikingly lower. Iatrogenic colonic perforation may be related to factor of well-experienced operator or not. Thus, colonoscopy in women tends to be more difficult than in men. Saunders et al. argued that recurrent looping of the colonoscope is caused by greater total colonic length in women than men despite a usually smaller stature.

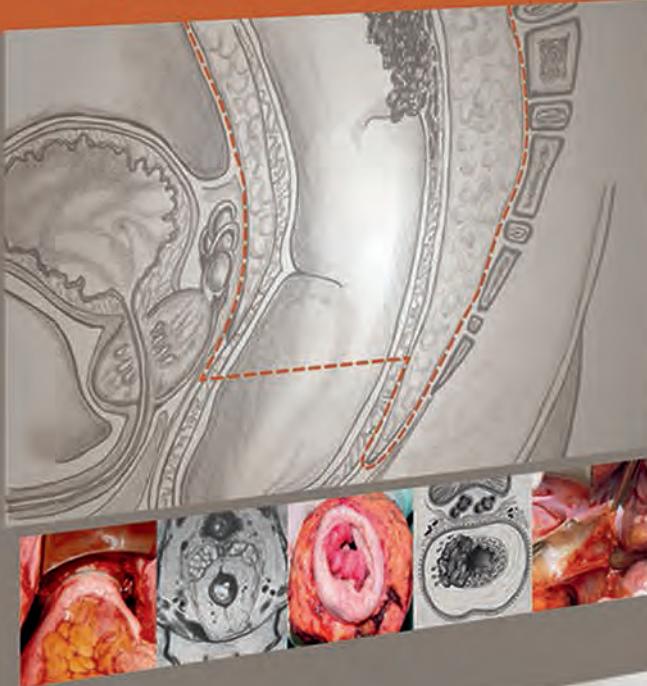
**Conclusions:** Iatrogenic colonic perforation during colonoscopy is a rare but serious complication. The sigmoid colon is the most common perforation site. Immediate operative management appears to be a good strategy for most patients. In our ten perforation cases, we followed the well-established principles of repair of the colonic perforations.

Zoran V. Krivokapić

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## SUBMUCOUS COLONIC LIPOMA PRESENTING WITH OCCLUSION AND BLEEDING (CASE REVIEW).

R. Miletic<sup>1</sup>, R. Maric<sup>1</sup>, D. Potpara<sup>1</sup>, D. Batinic<sup>2</sup>

<sup>1</sup> II Surgery Clinic, Clinical Centre East Sarajevo, CHS Foca

<sup>2</sup> Department of Pathology KC Istocno Sarajevo, KIBS Foca

**INTRODUCTION:** Lipoma of colon cancer is a rare tumor, usually small and asymptomatic. It is mostly located in the right colon and is more common in women. Preoperative diagnosis of these tumors is difficult because of submucous localisation.

**AIM:** The review the medical history of 73 years old patient, who presented with bleeding and occlusion of the colon cancer as a result of necrosis of mucousa above submucous lipoma, and with occlusion in the region of transversal colon.

**METHODS:** Documentations from the archives of the University Hospital Foca were used.

**RESULTS AND DISCUSSION:** The patient was admitted to our center with fresh rectorrhagia and signs of intestinal occlusion. On colonoscopy two tumors were. In the region of the sigmoid colon, there was a polyp 3 cm in diameter, and another tumor in the region of lienal flexure that was completely occluding the lumen. It had necrotic changes on its surface, that bled on manipulation with endoscopic forceps. As a malignant tumor was suspected, along with the clinical picture of occlusion that could only be solved by emergency surgery, the patient underwent surgical treatment in the Clinical Centre East Sarajevo, CHS Foca. The exofit tumor, size 6.5×5 cm, with ulcerated and necrotic surface was found in the specimen of the transverse colon. Pathohistologic diagnosis was established: lipoma submucosum intestini crassi transversi cum ulcerationem mucosae supra tumorem et lymphadenitis chronica reactiva. The diagnosis of adenoma tubulovillosum cum displasia gradus minoris was established by later polypectomy of the tumor in the sigmoid colon.

**CONCLUSION:** Although lipoma of the colon cancer is a rare tumor and is often discovered accidentally, it can have the symptoms that could mimick the carcinoma of colon. When there is a suspicion of a lipoma of colon, it must be carefully examined especially in elderly patients. The removal of the lipoma of colon should be performed with minimally invasive methods, laparascopy or endoscopy. The method of choice for diagnosis of these tumors is an endoscopic ultrasound.

## SURGICAL SOLUTION OF AN ANTERIOR ABDOMINAL WALL AND PARASTOMAL HERNIA AFTER THE COMPLICATION OF SURGERY WITH END COLOSTOMY – REPORT OF A CASE

J. Petrovic<sup>1</sup>, M. Zuvela<sup>1,2</sup>, J. Brzogic<sup>3</sup>, Z. Krivokapic<sup>1,2</sup>

<sup>1</sup> First Surgical Clinic, Clinical Center of Serbia, Belgrade, Serbia

<sup>2</sup> School of Medicine University in Belgrade

<sup>3</sup> Surgical unit, Medical Center Kladovo, Serbia

A 57 years old patient was admitted to our clinic with a large ventral and parastomal hernia in Jun 2012. Namely, he had an emergency surgery in 2011. for the injuries acquired in a traffic accident, during which an incidental tumor of the sigmoid colon with involvement of urinary bladder wall was discovered, but due to the severe haemorrhage only the exploration of the abdominal cavity was performed, with the intention to perform oncologic operation upon the stabilisation of patients condition and fulfillment of all necessary diagnostic procedures. Three weeks later he had another emergency surgery for the ileus caused by that tumor and followed by the rupture of urinary bladder, when Hartmann's procedure was performed along with the excision of the tumor and suture of the urinary bladder. During the postoperative period the dehiscence of the operative wound has occurred along with the evisceration of the intestines and deconnection of the end colostomy. That problem was solved by application of Tiersch skin transplants directly on eviscerated intestines and resection of end colostomy.

We performed adhesiolysis, second look surgery and colo-rectal end to end anastomosis. The anterior abdominal wall was reconstructed by modified Ramirez technique and application of a prolene mesh on previous opening of colostomy. This unique experience could offer a perspective to other surgeons, in cases that initially seem hopeless.

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## DIVERTICULAR BLEEDING: SUCCESSFUL LOCALIZATION AND MANAGEMENT

D. Mihajlovic, M. Nestorovic, G. Stanojevic, D .Miljkovic, B. Brankovic, V. Pecic, D. Petrovic, A. Todorovic

Clinic for General Surgery Clinical Center Nis, Nis, Serbia

**Introduction:** Lower gastrointestinal bleeding (LGIB) is common especially in elderly patients. It is caused by variety of conditions. Diverticulum of the colon is a common source of LGIB. By the age of 50 almost one-third of the population has diverticulosis. Ninety percent of the diverticula are in the left colon, but according to some authors bleeding is from the right colon at least 50% of the time. In most of the cases bleeding will cease spontaneously.

**Case report:** We report a case of 78 year old women with relapsing severe LGIB. Repeated colonoscopy and MSCT angiography could not determine bleeding site. The patient required total blood transfusion of 11 units despite fasting for bowel rest. After failure of conservative treatment and relapse of bleeding, the bleeding site was localized using superselective mesenteric arteriography. Patient was operated on, right hemicolectomy was performed. The source of bleeding was one of the diverticula in the right colon. Postoperative course was uneventful.

**Conclusion:** Colonic diverticulum is most frequent cause of LGIB, followed by angiodysplasias. As far as treatment is concerned, conservative therapy is usually the best approach, since in most cases bleeding will stop spontaneously. Surgery is considered in patients for whom a bleeding source has clearly been identified and conservative therapies have failed.



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## TREATMENT MODALITY OF NECROTIZING FASCIITIS

V. Pecic, G. Stanojevic, M. Nestorovic, D. Miljkovic, D. Mihajlovic, B. Brankovic, D. Petrovic, A. Todorovic

Clinic for General Surgery Clinical Center Nis, Nis, Serbia

**Background:** Necrotizing fasciitis (NF) is a rare, potentially lethal bacterial infection characterized by widespread necrosis of the skin, subcutaneous tissue, and superficial fascia. Descriptive terms vary based on the location, depth, and extent of infection (e.g., Fournier's gangrene [necrotizing perineal infection], necrotizing fasciitis [deep subcutaneous infection]).

**Patients and Methods:** A 6-year retrospective study of all patients presenting with NF requiring surgical intervention seen in Clinic for General Surgery, Clinical Center Nis. **Results:** There were 19 patients (11 males and 8 females). NF was localized in genitoperineal region in 89.5% of cases and in 10.5% in extraperineal region. Risks factors for development of NF were as follows: Diabetes mellitus in 9 (47.3%) patients, obesity in 4 (31.6%) and alcoholism in 4 (21.1%). In first 5 days 68.4% had surgical treatment. In 42.1% of patients hospitalization was shorter than 10 days, in 21.1% was longer than 20 days. Patients with a stoma had a higher mortality rate ( $p \leq 0.008$ ). Favorable outcome was noted in patients with perineal localization  $p \leq 0.004$ .

**Conclusion:** NF is rare but life-threatening form of soft tissue infection. Extensive use of antibiotics is necessary as well as aggressive surgical debridement and intensive wound care.

## GLYCERYL-TRINITRATE (0, 2%) OINTMENT – CHRONIC ANAL FISSURE – 12-YEAR RESULTS

R. Veljković, S. Sečen, D. Ivanov, M. Korica, D. Bjelajac, B. Rajkov, D. Petrović

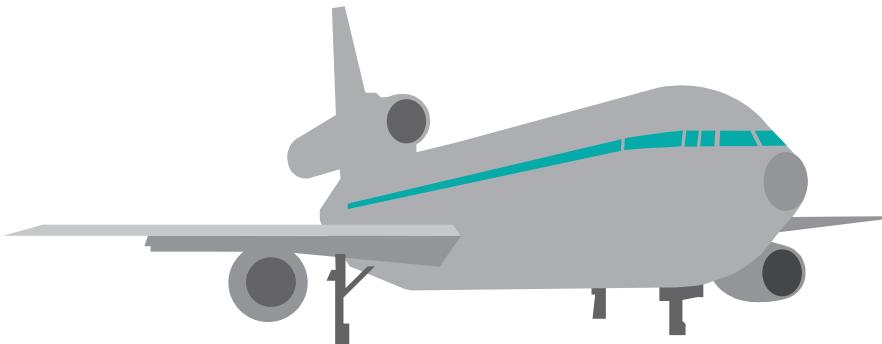
Clinic for Abdominal, Endocrine and Transplantational Surgery. Clinical Center of Vojvodina, Novi Sad, Serbia

Chronic anal fissure is caused by spasm and hypoxia of internal anal sphincter. Topically glyceryl trinitrate (GTN), a nitric oxide donor, has been demonstrated to be an effective first-line therapy for anal fissures.

In the last 12 years, 282 patients with physically proven diagnosis of chronic anal fissure were supplied with a one or two 6 weeks course of 0.2% GTN ointment for 3 times daily topically application to their chronic anal fissure. Treatment in excess of 12 weeks that was unsuccessful was deemed as a failure, and these patients were referred to another regimen. All patients were examined in outpatients 6 or 12 weeks later to assess for evidence of fissure healing. Later, the follow-up data were analyzed.

The study comprised from 150 women and 132 men (age 18–79 years: mean 47). Mean follow-up was 98 months (range: 7–125). At early follow-up (6 weeks post-treatment) healing rate was 55% (157 patients). Nine patients refused further treatment because of headache. Headache was developed by 39%, dizziness by 17%, perianal itching by 27%, and burning anal sensations by 22% of patients. At the second follow-up (12 weeks post-treatment) healing rate was 60% (171 pts). Side effects were similar. Another 18 patients discontinued topically treatment. After the follow-up of few years, symptoms recur early in the 78 patients, later in the 20 patients and 21 patients were lost, giving the failure rate of 48.6% (137 pts).

Topical GTN is low effective but first-line treatment for chronic anal fissures and must be considered as first election treatment in patients with chronic anal fissure to reduce the uncomfortable complications of surgical sphincterotomy. Surgery should be indicated in those patients who failed chemical sphincterotomy.



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**DILTIAZEM (2%) OINTMENT - CHRONIC ANAL FISSURE – 10-YEAR RESULTS**

S. Sečen, R. Veljković, D. Ivanov, M. Korica, B. Rajkov, D. Bjelajac, D. Petrović

Clinic for Abdominal, Endocrine and Transplantational Surgery. Clinical Center of Vojvodina, Novi Sad, Serbia

Chronic anal fissure is caused by spasm and hypoxia of internal anal sphincter. Topically diltiazem a calcium channel blocker has been demonstrated to be an effective first-line therapy for anal fissures.

The patients with physically proven diagnosis of chronic anal fissure were treated. In the last 10 years, 240 patients were supplied with a one or two 6 weeks course of 2% diltiazem ointment for 3 times daily topically application to their chronic anal fissure. Treatment in excess of 12 weeks that was unsuccessful was deemed as a failure, and these patients were referred to surgery, or other ointment regimen. All patients were reviewed in outpatients 6 and 12 weeks later to assess for evidence of fissure healing. Later, both the medical notes and telephone follow-up were analyzed. The study comprised from 129 women and 111 men (age 19–73 years; mean 50) Mean follow-up was 71 months (range: 7–99 months). Of these 240 patients at early follow-up, 6 weeks post-treatment healing rate was 50% (120 patients). Headache was developed by 11%, dizziness by 18%, perianal itching by 23%, and burning anal sensations by 24% of patients. At second follow-up (12 weeks post-treatment) healing rate was 55% (132 pts). Side effects were similar. 14 patients discontinued topically treatment early and another 11 later. After the follow-up 111 (46%) patients were referred to another treatment regimen, mainly surgical sphincterotomy.

Topically diltiazem is modern low effective but first-line treatment for chronic anal fissures. Side effects were mild and diltiazem must be considered as first-line treatment in patients with chronic anal fissure rather than glyceryl trinitrate or surgical sphincterotomy. Surgery should be indicated in those patients who failed chemical sphincterotomy.

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## CONNECTION BETWEEN INCREASED BLOOD FLOW IN HAEMORRHOIDAL ARTERIES AND HAEMORRHOIDAL DISEASE

S. Crnogorac, A. Gluhović, D. Jovanović, S. Stojanović, N. Kovačević

Clinical Center of Vojvodina, Emergency Center, Emergency Surgery Division, Novi Sad, Serbia

**Background:** In recent studies, it is estimated that treatment of uncomplicated haemorrhoidal disease goes in direction of treating blood vessels in haemorrhoidal cushions. Since Japanese surgeon Moringa started treating haemorrhoidal disease in 1995 with ligation of haemorrhoidal arteries (Doppler guided haemoroidal artery ligation) with enviable success, many other methods have been tested. Medical treatment is directed towards venous wall with also enviable success.

**Methods:** We suggested that there is an increased blood flow in haemorrhoidal cushions and vessels, and we performed an endoanal ultrasound in order to measure blood flow in haemorrhoidal arteries in patients with an uncomplicated haemoroidal disease (grades I-III). 75 successive patients were included in study. At first, everybody went to an endoanal ultrasound where flow through haemoroidal arteries was measured. After 5 days of therapy with Diosmin 600mg 3x1, and 4 to 6 weeks once a day, flow was measured again.

**Results:** Mean value of blood flow was 0,3m/s in patients with haemoroidal disease. There was no significant importance of stage of disease. After therapy, mean blood flow decreased to normal range up to 0,2m/s, which was found in healthy population. This result was in accordance with clinical improvement. **Conclusions:** There is an obvious connection between an increased blood flow through haemoroidal arteries and the haemoroidal disease. Endoanal ultrasound is a useful method which can help in evaluating an uncomplicated haemoroidal disease. Beside anamnesis, measurable evidence of improvement was obtained in treating a haemoroidal disease with Diosmin.

## DRAINAGE SETTON PROCEDURE IN TREATMENT OF PARANAL FISTULA

A. Gluhović , S. Crnogorac, N. Kovačević, D. Jovanović

Clinical Center of Vojvodina, Emergency Center, Emergency Surgery Division, Novi Sad, Serbia

**Background:** Paranal fistula is a communication between rectum and perineal skin. Internal opening starts from criptitis, originated from dental line, while external opening ends somewhere nearby an anus. A tract connecting these two openings is called fistula, and it is usually characterized with a sinus. Sinus is drained either through an internal or external opening. Treating of the fistulas is usually long-term and uncertain.

**Methods:** A series of 50 consecutive patients with intra- or suprasphincteric fistulas where treated with placement a Drainage Setton which was removed after 2-5 months, afterwards, we preformed fistulectomy or standard Setton procedure. Previously, each of them had recorded an endoanal ultrasound in order to detect exact location of the fistula tract and existence of sinus. We used surgical rubber gloves to pull through fistula tract to provide drainage procedure.

**Results:** In all patients endoanal ultrasound was helpful to investigate if there was chronic abscessus/ sinus in paraanal area. Only five patients (10%) needed standard Setton ligature procedure to cut through the sphincter muscle, in all others simple fistulectomy was enough to end the treatment. In short follow up, up to six months, we had one recurrence, a female patient with horseshoe fistula who came back with other-side abscessus. **Conclusions:** Drainage of chronic abscessus or sinus, which persists in background of paraanal fistulas, provides closing of secondary fistula tracts, shrinking of sinus and faster treatment with decreased possibility of recurrence.

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## SPINAL VS. GENERAL ANESTHESIA FOR HAEMORRHOIDECTOMY WITH LIGASURE™

Z .Zagorac, R. Zivic, Z. Jovanovic, B. Vekic, M. Kalezic

Department of Colorectal Surgery, Clinical Center Dr Dragisa Misovic - Dedinje

**INTRODUCTION:** Haemorrhoidectomy with LigaSure™ is a variant of the conventional Milligan-Morgan technique. The Ligasure vessel sealing system provides a combination of pressure and energy to create vessel fusion. A Visual Analogue Scale (VAS) is a measurement instrument that tries to measure a characteristic or attitude that is believed to range across a continuum of values and cannot easily be directly measured.

**PURPOSE:** The purpose of this study is to compare pain score and patient satisfaction between two different anesthetic methods for patients undergoing hemorrhoidectomy with LigaSure™, in 24 hours after surgery.

**PATIENTS AND METHODS:** Between 2005 and 2010, 97 patients (53 female and 44 male) were operated on in our hospital due to haemorrhoidal disease, with a median age of 56 years (31 to 75 years of age). In the III stadium of the disease we operated 51 patients while 46 patients were operated in the IV stadium (all with consequent anemia). Forty-eight patients underwent the procedure under intravenous general anesthesia (group 1), and forty-nine patients underwent the procedure under spinal anesthesia (group 2). We compared post operative pain levels measured with VAS in these two groups.

**RESULTS:** All patients were preoperatively prepared with standard procedures: anemia, paraffin oil, metronidazole. Intraoperative complications didn't occur. Eighty-seven patients were discharged within 24 hours of surgery and 11 within 48 hours. Postoperatively no additional bleeding was noticed. Pain score postoperatively was significant higher in group 1 (pain score of 6.1 vs. 1.7,  $p < 0.05$ ). Patient satisfaction level was superior in group 1 (satisfied or very satisfied: 43/48 in group 1 vs. 19/49 in group 2,  $p = 0.001$ ).

**CONCLUSIONS:** LigaSure™ haemorrhoidectomy gives satisfactory results in the treatment of haemorrhoidal disease and can be performed as one day surgery. Both anesthetic methods for haemorrhoidectomy were safe and effective without significant difference in postoperative complications. Patients with spinal anesthesia have significant lower pain score and need less dosage of analgetics in 24 hours from surgery, but patients with intravenous general anesthesia have better satisfaction level.

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## EFFICACY OF DIOSMIN AND BAND LIGATION IN THE TREATMENT OF HAEMORRHOIDAL DISEASE

B.Bojic<sup>1</sup>, S.Markovic<sup>1</sup>, S.Sreckovic<sup>1</sup>, D.Kalem<sup>1</sup>, D.Bojic<sup>1,2</sup>, P.Svorcan<sup>1,2</sup>, M.Protic<sup>1,3</sup>, Nj.Jojic<sup>1,3</sup>

<sup>1</sup> Gastroenterology and Hepatology Department, Zvezdara University Hospital, Belgrade, Serbia

<sup>2</sup> School of Medicine, University of Belgrade, Serbia

<sup>3</sup> School of Dentistry, University of Belgrade, Serbia

**OBJECTIVE:** To demonstrate the value of Diosmin and band ligation in the management of haemorrhoidal symptoms in Serbian patients attending the gastroenterology out-patient clinic.

**METHODS:** This is a prospective clinical study of 50 consecutive patients suffering from haemorrhoidal disease, grade II and III. Detailed history and proctoscopic examination to determine position, size, and degree of haemorrhoids was conducted in all patients attending the out-patient clinic at our Endoscopy unit. The patients were divided into two groups: 30 patients in Group I treated by combined therapy, Diosmin and band-ligation and 20 patients in Group II treated by band ligation and followed up for six months. Patients were followed up monthly during the study period or up to the haemorrhoid eradication. Proctoscopic examination was conducted at each consultation. The primary endpoint was the haemorrhoidal eradication or asymptomatic disease. The band-ligation session number as well as the number of applied bands during the therapeutic sessions was compared among the groups.

**RESULTS:** The mean age was 55 (range 28-77) years. The degrees of piles were II (22 and 12 patients in I and II group, respectively) and III degree (8 patients in both groups). Mean number of bands in the Group I (4,5; range 2-11) was significantly lower than Group II (6, range 1-14) (ANOVA, p=0,05). The mean number of sessions required per patient to achieve haemorrhoidal eradication or improve haemorrhoidal disease was 1, 6 (range 1-3) and 2,75 (range 1-5) in Group I and II, respectively (ANOVA, p<0,001). Eradication of hemorrhoids was achieved in 16 (53, 3%) and 9 (45%) patients in the Group I and II, respectively (p=0,3). No side effects of Diosmin were noticed.

**CONCLUSION:** Diosmin is a very safe and effective drug in the treatment of haemorrhoidal disease, grade II and III in combination with band ligation.

## DIOSMINE IN THE MANAGEMENT OF BLEEDING NONPROLAPSED HAEMORRHOIDS

M. Ceranic, M. Pavlov, P. Kovacevic, S. Latincic, D. Savic, D. Kecmanovic

Clinic for digestive surgery - First surgical clinic, Clinical center of Serbia, Belgrade, Serbia

Patients with acute haemorrhoidal crisis often need of an immediate and effective pharmacological approach to alleviate their pain, bleeding and swelling or have to be referred by the general practitioner to the surgeon for a definitive treatment. Effective and not invasive treatment control of the acute crisis could be of practical use in order to avoid or to delay invasive procedures to a time more convenient for the patient and/or for the surgeon.

The aim of this study is to describe a role of diosmine in the management of bleeding nonprolapsed hemorrhoids. From November 2003 to January 2010, 186 patients were treated with diosmine. Patients were treated with diosmine, (3x1, 5 days) and in addition a bulk agent (3, 26 g plantago ovata sachet, twice daily, for the period of next three months). Hemorrhoidal bleeding stopped after 3, 6 days. There were no side effects

Flavonoids are used for relief of acute symptoms (for control of bleeding and re-bleeding in all grades of haemorrhoids) and have been recommended for control of acute bleeding in patients waiting for a definitive outpatient treatment.



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## OPEN V.S. SEMI-CLOSED HEMORRHOIDECTOMY AND POSTOPERATIVE PAIN

P. Petričević, M. Petričević

General Hospital, Zrenjanin, Serbia

**PURPOSE:** Hemorrhoidectomy is a method of treating III and IV stadium of symptomatic hemorrhoids, with the best postoperative results. It is superior in regard to many outpatient procedures without anesthesia. Most frequent complications at the conventional hemorrhoidectomy are strong postoperative pain, urinary retention and infection. Our aim is to compare postoperative pain in two groups of patients with open versus semi-closed hemorrhoidectomy.

**METHODS:** We divided patients in two groups: Group A. with open and Group B. with semi-closed hemorrhoidectomy.

**RESULTS:** We are used statistic analyses of postoperative pain according to questionnaire and patient satisfaction. The patients of group A. demanded a small amount of analgesics, in the early as well as in the late post operative period.

**CONCLUSION:** Open hemorrhoidectomy results in less postoperative pain than semi-closed hemorrhoidectomy, especially in younger patients. Semi-closed hemorhoidectomy reduce postoperative bleeding and also result in less postoperative pain.

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## CLOSED HAEMORRHOIDECTOMY-FERGUSON-OUR EXPERIENCE

I. Kostic, M. Lazovic, M. Jorovic, Z. Trifunovic, B. Maric, D. Dabic

General Surgery-General Hospital Cacak, Cacak, Serbia

**Background:** Closed haemorrhoidectomy (secundum Ferguson) is an old and well-known technique for more than a few decades. In our department this technique was not performed more than 20 years, mostly because of „gold rule“ –Milligan-Morgan is gold standard for treatment of HD gr. III and IV.3 years ago a couple of our surgeons underwent education from coloproctology and have started doing this procedure again. **THE AIM:** Closed haemorrhoidectomy is 15 % of all operations in treatment of HD, according to foreign Coloproctology Societies .Our aim is to show that this technique still has good results in treatment, and to compare this technique and Milligan-Morgan (most common procedure)

**Methods:** This is retrospective analysis from May 2009 to May 2012. In the past 36 months 85 patients were operated from haemorrhoidal disease (Nodulli haemorrhoidales gr III and IV). 70 patients were operated by one of these techniques (Milligan Morgan and Ferguson).This is more than 82 %.Other patients were operated by LIGASURE haemorrhoidectomy and Laser-coagulation.

**Results:** During this time 14 patients were operated by this”old-new” Ferguson technique. This we call group A. This is 16, 4 % of all haemorrhoidal operations. 8 pts. are men and 6 pts. are women. Average age is 45, 7 years .Average hospital stay is 2,45 days, , average operational time is 32 minutes. Group B (Milligan-Morgan) 56 pts (66 % of all h.oper.) 30 men (53, 5%) and 26 women (46, 5 %).Average age is 47, 8 years. Average hospital stay 2, 62 days, average operational time 29 min. Every patient (from both groups) received one single shot antibiotic prophylaxis ( Cephazolin 2,00 gr and Metronidazol 500 mg ),received regional or OETA. We compare need for analgesia after operation and in 2 weeks after operation, healing of the wound and complications

**Conclusion:** There is no significant difference in need for analgetics after operation, healing of the wound is slightly faster in group A. Some new, but easier complications have occurred after closed haemorrhoidectomy, which is normal due to” learning curve”. Nevertheless this is a safe and good procedure in solving HD. **KEY-WORDS:** haemorrhoidal disease-closed haemorrhidectomy-option for treatment.

## PRESACRAL, RETRORECTAL DERMOID CYST IN A FEMALE PATIENT - CASE REPORT

A. Karagjozov<sup>1</sup>, I. Milev<sup>2</sup>, S. Antovic<sup>1</sup>, E. Kadri<sup>1</sup>

<sup>1</sup>Clinic of Digestive Surgery, Medical Faculty – Skopje

<sup>2</sup>Department of Surgery, Clinical hospital – Štip

The retrorectal tumors are well defined, classified and understood pathological entities in the literature but in practice they represent very unusual and infrequent pathology. We are presenting a case from the group of dermoid congenital retrorectal cysts which at first manifested itself clinically as inflamatous retrorectal cyst that had spontaneously rupture in the postanal space with local (tumor, dolor, calor, rubor, function laesa and fluctuation) and systemic signs of infection (fever, rise temperature, leukocytosis). On physical examination there was typical postanal dimple which gives a picture of “double anus” on inspection. On DRE there was retrorectal soft tumor with compression of the anorectum. Diagnosis was confirmed with MRI and fistulography. After a palliative treatment for absceding cyst with incision, Penrose drainage and daily washings with antiseptic solutions the patient was transferred in specialized institution - the Clinic of Digestive surgery at the Medical Faculty in Skopje for definitive treatment. The operation was performed with the patient in jack-knife position with conventional preparing of the colon and prophylactic antibiotic regiment started preoperatively. An on table anoscopy was performed at first which sowed typical mammilla at the internal opening of the fistulous communication of the cyst with the rectum about 3 cm above the posterior crypt of Morgagni. We started with excision of the external opening, and preceded with whole excision of the pericystic granulomatous tissue about 14 cm in length till the presacral point. The fistulous communication was excised completely and the rectum was sutured in two layers with separate sutures. The wound was laid open and the patient was discharged on the 5-th postoperative day. About one month the wound was treated with daily washings with antiseptic solutions and after that one month with only water. After two mounts the defecation is normal, the wound is sealed and there are no signs of inflammation and secretion locally. The retrorectal tumors are difficult for treatment as well as for diagnosis where even punctual biopsy is not recommended so they should be treated in specialized institutions by experienced surgeons from the moment of diagnosis to the definitive surgical treatment.

Keywords: retrorectal cyst, excision, fistulous communication

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## LONG-TERM ONCOLOGICAL OUTCOMES OF MULTIVISCERAL RESECTIONS IN PATIENTS TREATED FOR LOCALLY ADVANCED COLORECTAL CARCINOMA

I. Dimitrijevic<sup>1</sup>, S. Djurdjevic, S. Antić<sup>1</sup>, Z. Krivokapic<sup>1,2</sup>

<sup>1</sup>First Surgical Clinic, Clinical Centre of Serbia, Belgrade

<sup>2</sup>Medical School of Belgrade University

**Introduction:** Despite the advances in early detection of colorectal carcinoma (CRC) a number of patients is still diagnosed with locally advanced i.e. adherent CRC. If multiple distant metastases are excluded, appropriate surgical management of these tumors should include multivisceral resection (MVR), in which the cancerous and adherent structures are removed "en bloc". These procedures have to be carefully planned and carried out by an experienced surgeon in a high volume specialized institutions.

**Aim:** To analyze the number and structure of the resected organs, to determine the percentage of true tumor invasion and the five-year survival probability together with significant influencing variables in patients treated with MVR.

**Material and the methods:** The study included 222 patients treated with the MVR during in the period 1995-2012, with histopathologically diagnosed adenocarcinoma, regardless metastasis presence at surgery. All patients were treated by the same team of surgeons on the Third Department of The First Surgical Clinic, Clinical Center of Serbia in Belgrade. Demographic data, tumor localization, existence of local and distant recurrence, TNM stage, true local tumor and lymph node infiltration, the number of resected organs and structures as well as the survival were gathered from patient database and analyzed. The cutoff point in the follow up of these patients was determined to be January 2012.

**Results:** Among 222 patients, 55,4% were male, with an average age of 60,1+12 years, and the follow-up period was 32,4+29,3 months. 50,5% of the carcinomas was localized in the colon. According to the tumor stage, 41% had T3, and the remaining 59% had T4 tumors. The percentage of patients no lymph nodes affected (N0) was 44,1, while 23% of the N positive cases was N1 and 32,9% were classified as N2. Malignant adhesions were confirmed in 56% of the resected organs. Statistically significant difference in the five-year survival was demonstrated between the patients with T3 and T4 tumors ( $p=0.033$ ). Another statistically significant factor that influenced 5-year survival was N status. We compared the group of N0 patients with N1 and N2 populations in terms of 5-year survival and demonstrated statistically evident difference ( $p=0.008$  and  $p=0.000$  respectively).

**Conclusion:** Properly conducted, by an experienced surgeon, MVR of locally advanced CRC, especially in the group of patients with proven inflammatory adhesions, and in the node negative patient population proved to have significant influence on good 5-year survival and give these patients reasonably high chance for even cure.

**Key words:** colorectal carcinoma, multivisceral resections

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## SPLENECTOMY IN REFRACTORY PHASE OF CHRONIC RECIDIVANT THROMBOTIC THROMBOCYTOPENIC PURPURA (TTP)

T. Dragisic, Z. Rajic, G. Kaljevic, N. Savic, B. Zivotic

Institute of Hematology, Clinical Center of Serbia, Belgrade, Serbia

Thrombotic thrombocytopenic purpura (TTP) represents clinical syndrome characterized by microangiopathic haemolytic anemia, thrombocytopenia, and neurologic disorders. Often is present high fever and signs of kidney failure. This syndrome was first described by Moschcowitz year 1925.

TTP is rare disorder which occurs mainly in elderly patients. Even though pathogenesis remains unclear it is believed that formation of thrombocytic aggregates plays key role in development of TTP. Significant role in formation of thrombocytic micro aggregates have: endothelial dysfunction, multimers of von Willebrand factor and factors that induce thrombocyte aggregation. There are three forms of this syndrome: single attack of disease which does not reoccur after successful treatment, intermittent form with occasional relapses in irregular intervals and chronic form with frequent relapses in almost regular periods of time. Diagnosis is both laboratory and clinical. Findings in peripheral blood are: anemia, reticulocytosis, fragmented erythrocytes. As result microangiopathic anemia occurs, elevated LDH, and low concentration of haptoglobin. Treatment includes plasmapheresis, corticosteroid drugs, erythrocyte transfusions and immunosuppressive drugs. In patients, in whom after two weeks remission is not achieved, splenectomy should be considered.

We present 56 year old male patient with chronic form with frequent relapses. First attack occurred in year 2007 and since then, patient had several exacerbations and relapses. Patient was treated by protocol for TTP. Partial remission was achieved. It was decided that splenectomy should be performed. Splenectomy was done in year 2012. Postoperative period was complicated by hemorrhage. Because of that patient was treated surgically, tamponade was performed in order to stop bleeding. Patient required prolonged hospitalization in intensive care unit. Upon discharge, patient was in remission of disease, further treated as outpatient.

## OUTCOME OF SURGICAL TREATMENT FOR PATIENTS WITH T4 CARCINOMA OF THE RECTUM WITHOUT PREOPERATIVE RADIATION THERAPY

Z. Zagorac<sup>1</sup>, D. Kecmanovic<sup>2</sup>, M. Pavlov<sup>2</sup>, M. Ceranic<sup>2</sup>, B. Vekic<sup>1</sup>

<sup>1</sup>Department of Surgery, Sector of Colorectal Surgery Clinical Center Dr Dragisa Misovic

<sup>2</sup>First Surgical Clinic, Clinical Center of Serbia.

**PURPOSE:** This study examines five-year disease-free survival for patients with T4 carcinoma of the rectum, on whom was not perform preoperative radiotherapy and evaluation of prognostic factors influencing five-year disease-free survival.

**METHODS:** During a nine-year period, all patients with rectal cancer were prospectively audited. This study involves 50 patients, man and women who have had T4 carcinoma of the rectum, and were treated curatively. For all tumors of the rectum, total mesorectal excision was preformed. Organ invaded, type of treatment and outcome were analyzed.

**RESULTS:** Of the 50 patients, all of them had visceral involvement without pelvic wall involvement. The most frequently involved organ was bladder, followed by seminal vesicle, prostate, uterus and vagina. Low anterior resection with resection of organ involved was performed in 16, abdominoperineal resection with resection of organ involved in 14, total pelvic exenteration in 10 and posterior pelvic exenteration in 10 patients. Of 20 with bladder and/or ureter invasion, 50 % were treated with partial resection of bladder. Overall five-year disease-free survival was 28%. Multivariate analysis revealed that lymph node metastasis was significant predictor of survival.

**CONCLUSION:** Completeness of resection and absence of lateral and central lymph node metastasis is the key factor influencing oncological outcome.

**KEY WORDS:** T4 rectal cancer, total mesorectal excision, pelvic exenteration, survival



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### 3-PHOSPHOGLYCERATE DEHYDROGENASE POLYMORPHISM IN PATIENTS WITH COLORECTAL CARCINOMA

M. Ristanović<sup>1</sup>, B. Dimitrijević<sup>1</sup>, V. Perović<sup>2</sup>, B. Rovčanin<sup>1</sup>, Z. Krivokapić<sup>3,4</sup>, V. Marković<sup>3,4</sup>, I. Dimitrijević<sup>3</sup>

<sup>1</sup>Institute of Human Genetics, University of Belgrade, Faculty of Medicine

<sup>2</sup>Institute of Mother and Child Health Institute of Serbia

<sup>3</sup>First Surgical Clinic, Clinical Center of Serbia

<sup>4</sup>Medical School of Belgrade University

**Introduction:** Colorectal cancer (CRC) is one of the most common malignant tumors and the second leading cancer in Serbia. Recent studies suggest important role of both environmental and genetic factors in cancerogenesis. 3-Phosphoglycerate dehydrogenase (3-PHGDH) gene overexpression is associated with patogenesis of human cancer and contributes to cell proliferation.

**Aim:** The objective of our study was to assess the association of PHGDH gene polymorphism in group of patient with colorectal cancer and control group of healthy men.

**Methods:** The survey was carried out in the Department of Human Genetics-Medical School, University of Belgrade. The study has encompassed 60 man diagnosed with colorectal cancer in The First Surgical Clinic, Clinical Center of Serbia and 85 health males volunteers. The DNA was isolated from the peripheral blood with solting out method. The genotypes 3-PHGDH polymorphism was determined by Polymerase Chain Reaction (PCR) and Restriction Fragment Length Polymorphism (RFLP). Gel-electrophoresis was used to separate DNA fragments.

**Results:** There was a statistically significant difference between frequencies for genotypic distribution of rs541503 polymorphism in patients with colorectal carcinoma and healthy volunteers ( $p=0.0041$ ,  $p<0.01$ ).

**Conclusion:** In the present study we found TT genotype as the most frequent in both of group of patients with colorectal carcinoma and control group. The results of our study also suggest that C allele might be factor of risk associated with colorectal cancer. It is necessary to undergo further testing with more adequate test groups in order to get firm results.

**Key words:** PHGDH gene, colorectal cancer, PCR, RFLP

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## LOCAL RECURRENCE RATES IN RECTAL CANCER PATIENTS TREATED WITH PREOPERATIVE RADIOTHERAPY IN THE TIME BEFORE AND AFTER TOTAL MESORECTAL EXCISION

D. Scepanovic<sup>1</sup>, M. Pobijakova<sup>1</sup>, Z. Dolinska<sup>1</sup>, A. Masarykova<sup>1</sup>, M. Simek<sup>2</sup>

<sup>1</sup>Department of Radiation Oncology

<sup>2</sup>Clinic of Surgical Oncology

National Cancer Institute of Slovakia, Bratislava, Slovakia

**Background.** - Local recurrence is a major problem after rectal cancer surgery. Local recurrence rates historically vary between 15% and 45%. The introduction of total mesorectal excision (TME) as treatment for patients with rectal cancer has led to an improved local control and survival when compared with historical controls.

**Purpose.** - To analyze local recurrence rates in patients treated with preoperative radiotherapy with/without chemotherapy in the time before and after total mesorectal excision.

**Material and methods.** Four hundred eighty patients were enrolled between January 2004. and December 2010. To be eligible, patients had to have histologically confirmed adenocarcinoma of the rectum, without evidence of distant metastases, and the inferior margin of the tumor had to be located not farther than 15 cm from the anal verge. All patients had preoperative radiotherapy with/without chemotherapy.

**Results.** - The local recurrence rate in the group of patients without total mesorectal excision was 20% versus 5% in the group of patients with total mesorectal excision ( $p<0.001$ ).

**Conclusion.** - The introduction of TME has reduced the rate of local recurrence to <10% and to ≤6% when TME has been combined with the preoperative radiotherapy alone or combined with chemotherapy.

## LAPAROSCOPIC INTERSPHINCTERIC RESECTION - INDICATIONS AND CONTRAINDICATIONS

K. Ivanov, N. Kolev, V. Ignatov, A. Toney, G. Ivanov

Medical University of Varna, University Hospital "St. Marina", Varna, Bulgaria

**Introduction:** In what patients with diagnosis of low rectal cancer, the proctectomy with intersphincteric resection (ISR) may be a viable alternative to abdominoperineal resection, with adequate oncological outcomes. The sphincter preserving with good function is a primary target for the good quality of the operation.

**Methods:** A systematic review of the literature was undertaken to evaluate evidence regarding indications and contraindications, oncological outcomes, rate of the postoperative complications after ISR for low rectal cancer. We report our surgical experience in 38 operated patients with lower rectal cancer by intersphincteric resection. All were operated in First Surgical Clinic, University Hospital "St. Marina". The patients were divided in two groups – open surgery (OS, n=21) and laparoscopic surgery (LS, n=17).

**Results:** After applying comprehensive search, a 11 studies involving 1007 patients were included (mean age 57.5 years, 65.3.0 per cent men). R0 resection was achieved by ISR in 94.0 per cent. The operative mortality rate was 0.9 per cent and the rate of complication was 25.8 per cent. According to our results the complication rate was comparable in both LS and OS groups (5.4% and 3.8%, respectively, p=0.428). In the LS group we observed shorter hospital stay, shorter operative time (16 minutes less, p=0.23) and less operative blood loss (p=0.002). The median follow-up period was 34 months (from 20 to 42.5 mo). The rate of local recurrence is comparable in both groups (LS – 2.6%, OS – 7.7%, p=0.184). The combined three-year disease-free survival for all stages was 82.1% (95%, CI: 73.7-90.2%) for the LS group and 77.0% (95% CI: 66.9%-86.9%) for the OS group (p=0.523).

**Conclusion:** Oncological outcomes after ISR for low rectal cancer are acceptable, with diverse, often imperfect functional results. The laparoscopic ISR is a safe minimally invasive sphincter-preserving alternative method. The oncological feasibility of the laparoscopic ISR should be confirmed by long-term follow-up, as the midterm results are equivalent to those after OS.

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## CONSUMPTION OF MEET DURING ADOLESCENT PERIOD AS A PREDICTOR FOR COLORECTAL CANCER

Lj. Sokolova Đokić<sup>1</sup>, S. Đukić Dejanović<sup>2</sup>, N. Đokić<sup>3</sup>, Ž. Prijić<sup>4</sup>, R. Jovičić<sup>5</sup>

<sup>1</sup>Department of Public Health Sombor, Sombor

<sup>2</sup>University of Kragujevac, Faculty of Medicine, Kragujevac

<sup>3</sup>Master Graphic Engineering and Design, Novi Sad

<sup>4</sup>Doctor of biotechnical sciences, Sombor

<sup>5</sup>Medical school student, Novi Sad

Red meat and processed meat may increase the risk of developing colon cancer. A small amount of red meat, not more than 50 gr. week and avoid processed meats completely, significantly reducing the risk of this disease. Does not matter what consumed our youth and what are the risks of consuming large quantities of meat. The aim of this study was to investigate the frequency of consumption of red meat, meat products and eggs, and chicken meat and fish in high school and college students in Sombor and assume the risk of colon cancer. It was conducted a survey on the incidence of these foods alone during their weekly food and on the basis of the obtained data on height and weight, calculated body mass index (BMI). Surveyed a total of 225 adolescents, of which 145 high school students, 115 girls and 32 men and 78 students, 43 girls and 35 men from different places in Vojvodina. Normally nourished the 84% of high school and as many high school students and 46% male and 98% of female students. More than 50% of the male student population is over-nourished. Half of the surveyed male population of red meat daily, while the girls eat more fish and chicken. Male population is more risky for the development of colon cancer.

Keywords: red meat, young, colon cancer

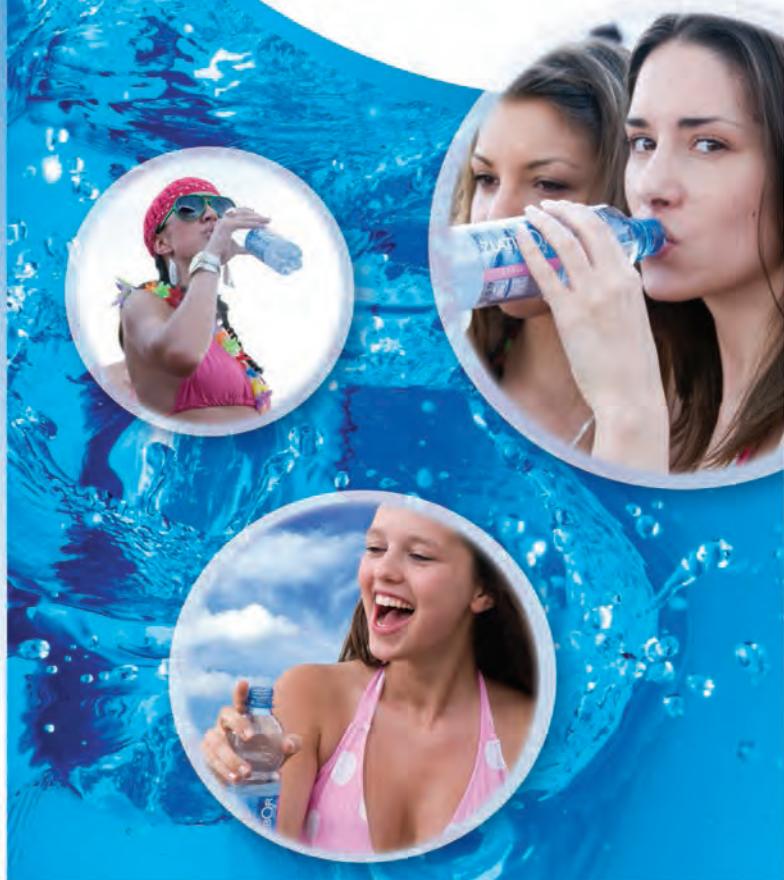
# ZLATIBOR voda<sup>2</sup>

## VODA JE LEK!

Voda je jedini napitak za svakodnevnu upotrebu koji se ne može zamjeniti ni jednim drugim. Vodu treba konzumirati ravnometrično, tokom čitavog dana. Lekari je preporučuju ujutru, za pročišćavanje i osveženje organizma, pre svakog obroka, kao i jedan čas posle jela, između obroka, pre spavanja, svaki put kada čovek oseti umor i pre svake rekreacije. Konzumiranje dovoljne količine vode je način da spričimo bolest i prevremeno starenje organizma organizma.

## ZAŠTO PIJEMO ZLATIBOR VODU?

Nisu sve vode iste. Njihov kvalitet, osim porekla, određuje sastav minerala u njima. Poznato je da nedostatak pojedinih minerala u organizmu može loše uticati nazdravlje čoveka. Zlatibor voda spada u prirodnu, izvorsku, slabomineralnu vodu, sa niskim sadržajem natrijuma. Osobenost njenog sastava čini idealan odnos kalcijuma i magnezijuma koji blagotvorno deluje na organizam čoveka. Prednost slabomineralnih voda je u tome što se mogu neograničeno konzumirati i svakodnevnu upotrebljavati u ishrani bez bojažni da se organizam može opteretiti njihovom prekomernom količinom, zbog čega se i preporučuju celoj porodici. Sadrži idealno izbalansiran odnos soli, minerala i olegoelementata. Zlatibor voda će zadovoljiti potrebe organizma za mineralima, ali će istovremeno očistiti organizam od svih toksina i nečistoća kojima smo izloženi svakog dana i omogućiti revitalizaciju čitavog organizma.



## TREATMENT OF RECTAL CANCER IN CASUISTIC CLINIC FOR ABDOMINAL SURGERY, CLINICAL CENTRE OF THE UNIVERSITY OF SARAJEVO (2006-2010.)

Z. Kandić <sup>1</sup>, N. Firdus <sup>1</sup>, A. Kandić <sup>1</sup>, L. Ćatić <sup>2</sup>, A. Kandić <sup>3</sup>, E. Kandić <sup>4</sup>

<sup>1</sup>Clinic for Abdominal Surgery, KCU Sarajevo, <sup>2</sup>Clinic for the Plastic surgery, KCU Sarajevo,

<sup>3</sup>Clinic for the Gynecology, KCU Sarajevo, <sup>4</sup>Kandić Enis, mr ph, „Alea dr Kandić“ Sarajevo, Bosnia and Herzegovina.

The aim of this study is point out the necessity of early diagnosis and protocol of surgical and oncological approach to the treatment of this malignant disease which must be done before choosing any operative procedure in order to prevent postoperative morbidity.

On the material of the Clinic for Abdominal Surgery at the Clinical centre University of Sarajevo, during the four-year period (from 2006 to 2010), out of the 406 patients with CRC, 261 of them (64.3 %) had cancer of the final part of the colon and rectum. In this case, all the time of the treatment, protocol was strictly applied. Primary surgery was performed on the early stages of the disease. Radiochemotherapy (RCT) followed by operation after 6 to 8 weeks is applied in the progressive state of the disease with the penetration of the mesorectal fascia with positive lymph-gland assessment (NMR-nuclear magnetic resonance).

Out of 261 operated patients, 5 of them (1.9 %) underwent transanal resections where the tumor was up to 2 cm; 104 patients (39.8 %) underwent rectal resection with TME (II and III tumor states of recto-sigma); 24 (9.2 %) patients underwent amputation; 156 (22.4 %) underwent left hemicolectomy with rectal resection and 29 (11 %) underwent intersphincteric colo-transversal-anal anastomosis. The operation by Hartman was performed on 44 (16.8 %) patients and colostomy on 10 (3.8 %) patients in emergency service. In the tumors with low localization we do low colo-transversal-rectal or ultra-low intersphincter colo-anal anastomosis. Total mesorectal excision and lymphadenectomy is our priority. We fully respect the oncologic approach, i.e. complete removal of the affected organ with the lymphovascular arcade.

Operative lethality up to 30 days was 2.5 % (comorbidity, thromboembolism). Owing to combined protocolar approach of surgical and radiochemotherapy, extirpational interventions are not so frequent any more compared with resections with low and ultra-low anastomosis.

Team work and close cooperation of oncologic team of physicians (surgeons, gastroenterologists, pathologists, oncologists, radiotherapeutists) as well as respect for the protocol of the treatment are the most important factors of a successful oncologic surgery.

Key words: rectal cancer, resection and extirpational intervention, protocolar approach

## USE OF VACUUM-ASSISTED CLOSURE DEVICE IN A DISASTROUS FORM OF OPEN ABDOMEN AND STOMA SITE INFECTION: A CASE REPORT

M. Popović<sup>1</sup>, V. Marković<sup>1,2</sup>, J. Petrović<sup>1</sup>, G. Lazović<sup>3</sup>, Z. Krivokapić<sup>1,2</sup>

<sup>1</sup>First Surgical Clinic, Clinical Center of Serbia, Belgrade, Serbia

<sup>2</sup>School of Medicine University in Belgrade

<sup>3</sup>Clinical Center of Serbia, Belgrade

A 58 years old patient, BM, was admitted to our ward, after several laparotomies due to the distal and liver spreading of previously operated cancer of sigmoid colon cancer. Upon admittance the patient developed stercoral peritonitis, and was urgently operated. Another laparotomy revealed perforation of the necrotic segment of distal jejunum, due to the thrombosis of regional blood supply. A resection of this segment forming terminal jejunostomy was then performed.

Being subjected to several repeated laparotomies, with diffuse abdominal sepsis, this abdominal wall was almost impossible to reconstruct. Proximity of the jejunostomy to the laparotomy wound, clearly complicated, already disastrous situation. It did not take long before jejunostomy wound disrupted, and two wounds joined in one large complicated and infected area, impossible to manage. The only possible solution was to apply VAC therapy.

After isolating and hermetizing jejunostomy, which was luckily fixed in place with the underlying large omentum, we were able to position polyethylene foam dressing over the paraffin saturated gauze. Placing the barrier over the entire abdomen, and over the stoma fixtures, we were able to establish 125 mmHg of negative pressure, and regular emptying of jejunostomy directly into bag. We changed dressings daily, for the first few days and noticed exceptionally progress in the status of the abdominal wound. After a while, there were no reasons for daily redressing, but for once in three days. Significant signs of the wound shrinkage were noticeable after three weeks, and after six weeks we begin to make plans of definitive closure or possible reconstructive surgery, when the patient state started to deteriorate, and lethally ended with signs of cardiopulmonary complications.

Conclusion:

Although the treatment of this extremely severe patient ended tragically, it gave us an opportunity to apply VAC therapy as a last resort in such cases, and gain positive experience that could not be otherwise seen in everyday clinical practice.

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## DISTANT METASTASES IN PATIENTS WITH LOCAL RECURRENCE OF RECTAL CANCER

S. Bilali, A. Karaj, A. Mazreku, A. Mitrushi, I. Pano

University Hospital Center "Mother Teresa", Tirana, Albania

**PURPOSE:** A remarkable increase has been noted in the rate of incidence of rectal cancer. Post or preoperative adjuvant treatment has significantly decreased the risk of local recurrence, but still only about 50% of all patients with rectal cancer treated radically can achieve a permanent cure. The majority of failures are due to local recurrence (LR) and common distant metastases (DM). This study was undertaken to clarify the clinical course of patients with local recurrence of rectal carcinoma with special reference to distant metastases.

**METHODS:** This retrospective study involved 83 patients with local recurrence of rectal cancer from 2002-2009. We reviewed retrospectively the clinical course of 46 patients who did not have distant metastases when local recurrence was initially detected. The mean age was 59 years. Factors analyzed contained general clinical factors (age, gender, etc) characteristics of primary tumor (size, depth, differentiation, vessel invasion, LN metastasis etc), locally recurrent disease (size, location, synchronicity, type of invasion etc) and treatment (surgical resection, systemic chemotherapy, radiation). Accumulated distant metastases rates were calculated by the method of Kaplan and Meyer. Factors related to distant metastases were analyzed univariately by log-rank test.

**RESULTS:** Distant metastases were observed in 28 patients (61%), and were mostly found in liver (38%), lung (21%), and both (17%). Accumulated distant metastases rates at 1 year and at 3 years were 24% and 50% for localized type, 22% and 65% for sacral invasive type, and 85% and 100% for lateral invasive type. Male gender was found to be an independent factor increasing the risk. Surgical resection of local diseases or systemic chemotherapy did not affect the incidence of subsequent distant metastases. The stage of the disease is an indisputable risk factor for distant metastases and 'early' local recurrences. The pattern of pelvic invasion was the significant risk factor which influenced accumulated distant metastases rate.

**CONCLUSION:** Patients with local recurrence of rectal cancer have high risk of distant metastases, and multimodal treatment strategy is required. Surgical resection may not be applicable to patients with recurrence involving the lateral pelvic wall.

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## SURGICAL MANAGEMENT OF LOWER GASTROINTESTINAL BLEEDING

M. Nestorovic, G. Stanojevic, D. Mihajlovic, B. Brankovic, V. Pecic, D. Miljkovic, D. Petrovic, A . Todorovic

Clinic for General Surgery Clinical Center Nis, Serbia

Surgical management of lower gastrointestinal bleeding Nestorovic M, Stanojevic G, Mihajlovic D, Brankovic B, Pecic V, Miljkovic D, Petrovic D, Todorovic A Clinic for General Surgery, Clinical Center Nis Introduction: Gastro intestinal bleeding is traditionally divided to upper and lower in relation to ligament of Treitz. Lower gastrointestinal bleeding is not uncommon with reported yearly incidence of 20-27 events per 100.000 people and substantial morbidity and mortality. It is more frequent in elderly population but luckily in about 80% of cases bleeding will subside. Identification of the bleeding site represents biggest challenge. There are various diagnostic tools for localizing bleeding site and its cause but each of them has their own advantages and disadvantages. Patients and methods: This is a case series of patients hospitalized in Clinic for General Surgery in Nis for LGIB in the period o from January 2009 until Jun 2012. Results: During this period 36 patients were hospitalized for LGIB. In 80.5% of cases bleeding stopped after conservative treatment. Seven patients (19.5%) required surgical intervention in order to stop the bleeding. Angiodysplasia was identified as a cause in 3 patients, inflammatory bowel disease in 2 patients and 2 patients had diverticulosis. Postoperative mortality rate in this case series was 14.2%.

Conclusion: There are no guidelines for therapy of lower gastrointestinal bleeding. All published data are retrospective, case series or review articles. Approach and therapy are different in every institution according to availability of technical support or human resources. Multidisciplinary approach is mandatory for successful diagnosis and treatment of LGIB.

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