



13th Annual Conference of Venous Association of India

Theme : Newer Initiatives in Venous Interventions

16th -19th
January, 2020

The Lalit, Mumbai

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Welcome Message

Dear Friends,

Welcome to the 13th Annual Conference of the Venous Association of India to be held at Mumbai in 2020.

With increasing awareness of Venous Diseases amongst the population at large, and the rapid advances in technological innovations in treating vein disorders, it has become very important for clinicians treating patients suffering from Vein diseases to update their knowledge at regular intervals.

The VAICON conferences have always aimed to deliver state of the art knowledge to its delegates through outstanding National and International Faculty. The 13th edition of VAICON will also attract experts from all over the world to Mumbai, the financial nerve centre of India.

We welcome you to come to Mumbai to attend VAICON 2020, and to enjoy the hustle and bustle of this vast megapolis – the city that never sleeps.



Dr. Shoaib Padaria
Chairman, Organising
CommitteeVAICON 2020



Dr. Harinder Singh Bedi
Co-Chairman
VAICON 2020



Dr. Roy Varghese
President VAI



Dr. Ravul Indal
Immediate Past President
VAI

Executive Committee of VAI 2019-2021



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Immediate Past President
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PHARMA

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2013-2015 : **Dr. Shoaib Padaria**

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Annual Conferences of VAI with organisers

CONFERENCE	DATE	CITY	ORGANISING CHAIRMAN
VAICON 2008	19-20 Apr 2008	Chennai	Dr. Sunderraj Saravanan
VAICON 2009	23-25 Jan 2009	Hyderabad	Dr. Ramakrishna Pinjala
VAICON 2010	23-23 Jan 2010	Banglore	Dr. Vasudeva Rao
VAICON 2011	4-5 Feb 2011	Chandigarh	Dr. Ravul Jindal
VAICON 2012	27-28 Jan 2012	Cochin	Dr. Roy Varghese
VAICON 2013	24-26 Jan 2013	Goa	Dr. Shoaib Padaria
VAICON 2014	6-8 Feb 2014	Gurgaon	Dr. Rajiv Parakh
VAICON 2015	5-7 Feb 2015	Vellore	Dr. Sunil Agarwal
VAICON 2016	11-13 Feb 2016	Jaipur	Dr. Ravul Jindal & Dr. Shoaib Padaria
VAICON 2017	2-4 March 2017	Varanasi	Dr. Ajay K Khanna
VAICON 2018	18-21 Jan 2018	Baroda	Dr. Vijay Thakore
VAICON 2019	17-19 Jan 2019	Hyderabad	Dr. Ramakrishna Pinjala
VAICON 2020	16-19 Jan 2020	Mumbai	Dr. Shoaib Padaria
VAICON 2021	23-25 Jan 2021	Chandigarh	Dr. H.S. Bedi



VTE Management

The geko™ is a battery powered, disposable, neuromuscular electrostimulation device designed to increase blood flow in the deep veins of the leg¹, reducing the risk of venous thromboembolism (VTE). The geko™ device stimulates the common peroneal nerve activating the calf and foot muscle pumps, increasing venous, arterial and microcirculatory blood flow^{2,3}. The increase in blood flow is similar to that achieved by walking, equal to 60%⁴, without a patient having to move⁵. In immobilised acute patients, when other VTE prophylaxis strategies are contraindicated or impractical, the NICE approved and FDA cleared geko™ device is clinically proven to prevent VTE⁶ and provides an option where previously patients would have had no other intervention available to them. The geko™ device has also been shown to enhance blood flow and improve the environment for healing in patients with venous ulcers⁷.

References:

1. NICE medical technologies guidance [MTG19] Published date June 20 2014
2. A.Nicolaides, M Griffin, Measurement of blood flow in the deep veins of the lower limb using the geko™ neuromuscular electro-stimulation device. Journal of International Angiology August 2016-04
3. Tucker A, Maass A, Bain D, Chen LH, Azzam M, Dawson H, et al. Augmentation of venous, arterial and microvascular blood supply in the leg by isometric neuromuscular stimulation via the peroneal nerve. The International journal of angiology: official publication of the International College of Angiology, Inc. 2010 Spring;19(1): e31-7
4. Jawad, H., Bain, D., Dawson, H., Crawford, K., Johnston, A., Tucker, A.T. The effectiveness of a novel neuromuscular electrostimulation method versus intermittent pneumatic compression in enhancing lower limb blood flow. 2014 Journal Vasc Surg. Vol 2, No 25
5. Klabunde, RE (2014). Cardiovascular Physiology Concepts. Available at:
<http://cvphysiology.com/Microcirculation/M010> [Accessed 21 Feb. 2018]
6. Natarajan et al. The use of the geko™ device (a neuromuscular electrostimulation device) and the resulting activation of the foot and calf muscle pumps for the prevention of venous thromboembolism in patients with acute stroke
7. Harding et al Neuromuscular electrostimulation on lower limb wounds, British Journal of Nursing Vol.27, No.20



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Scientific Program

Day 1 | 16th January, 2020, Thursday

TIME	SESSION	SPEAKER
1400-1700	1. Workshop on Lasers in Haemorrhoids and Proctology	
1400-1500	a) Lasers in Haemorrhoids	
	i. Presentation	Dr Kushal Mittal (India)
	ii. Office Procedures: IRC, Banding, Sclerotherapy	Dr Kushal Mittal (India)
	iii. Laser Haemorrhoidoplasty	Dr Kamal Gupta (India)
1500-1600	b) Symposium on Fistula in Ano	
	i. Managing Fistula under vision – VAAFT (Video Assisted Anal Fistula Treatment with Laser)	Dr Kushal Mittal (India)
	ii. Laser in Fistula	Dr Kamal Gupta (India)
	1. Fistula Laser Closure (FiLaC)	
	2. Distal Laser Proximal Ligation	
	3. Distal Laser Proximal SLOFT	
1600-1700	C) Symposium on Pilonidal Sinus	
	i. Laser Treatment (SiLat)	Dr Kamal Gupta (India)
	ii. Video Assisted Laser Ablation	Dr Kushal Mittal (India)
1400-1700	2. Workshop on Vascular Malformations	
	1. Classification and Diagnostic evaluation	TBA
	2. Management of Venous and Lympho-venous malformations	Dr Manish Rawal (Ahmedabad)
	3. Tips and tricks for the Management of Arterio-Venous Malformation	Dr Vijay Thakore (Vadodara)
	4. Surgical Management of Vascular Malformation	Dr Sumit Kapadia
	5. Complications of Vascular Malformations	TBA

	6. Management of Recurrent Vascular Malformations	Dr Ravul Jindal (Chandigarh)
	7. Clinical cases and discussions= video recorded cases	
1400-1700	3. Workshop on Dialysis and Arterial Access	
	Faculty: Dr Tarun Grover, Dr Ravul Jindal, Dr R Sekhar, Dr Paresh Pai, Dr Virender Sheorain, Dr Sumit Kapadia	
	1. Pre emptive AVF	
	2. Venous Duplex Scan	
	3. Normal Anatomy and Physiology	
	4. Vein mapping	
	5. Post AVF/ Planning for Fistuloplasty	
	6. Assessment of CFO, Planning for Recanalisation	
	7. Prograde and Retrograde Permacath: How to do it	
	8. AVF: Step by Step	
	9. Basilic Vein Transposition	
	10. When to opt for AV Graft	
1730-1830	Executive Committee Meeting of Venous Association of India - Board Room, Mezzanine Floor	
1930-2200	Welcome Dinner and Entertainment Program - Poolside Hotel Lalit	

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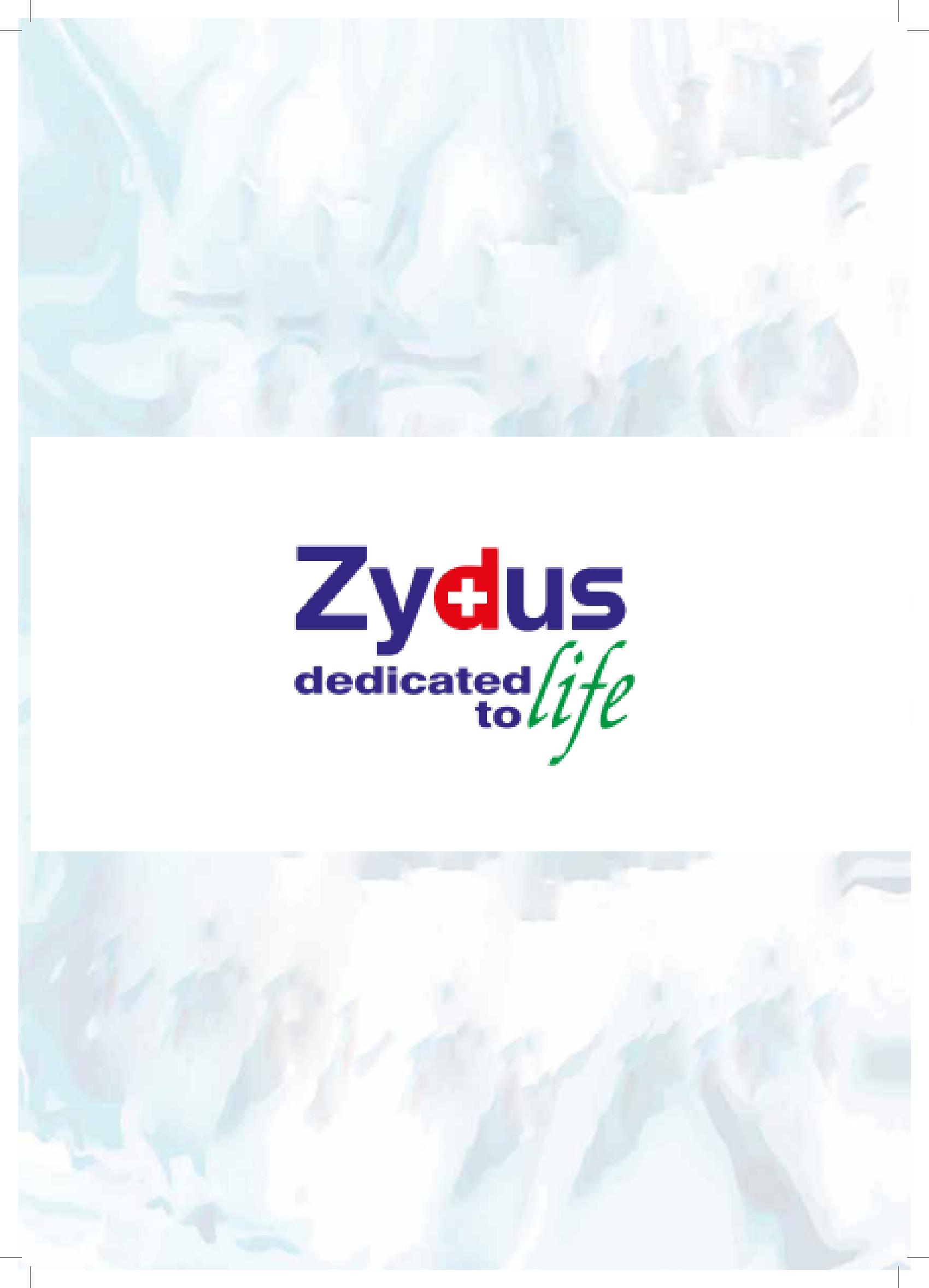
Day 2 | 17th January, 2020, Friday

TIME	SESSION	SPEAKER
0900-0910	Introduction and Commencement of Conference	Dr Shoaib F Padaria (Mumbai) Dr Roy Varghese (Kerala)
0910-1030	Pulmonary Embolism Symposium Moderator: Dr H S Bedi, Prof Emad Hussein, Dr Pinjala, Dr Devendra Dekiwadia Panelist: Dr Vijay Thakore, Dr Robbie George, Dr Sanjay Desai	
0910-0920	Medical Treatment for Pulmonary Embolism: When, Why and for how Long?	Dr H S Bedi (Ludhiana)
0920-0930	Role of CT and MRI in Pulmonary Embolism	Dr S B Desai (Mumbai)
0930-0940	Pharmaco-Mechanical Intervention for PE	Dr Tarun Grover (Gurgaon)
0940-0950	Role of Vena Cava Filters: Current Indications	Dr Vinay Satwah (USA)
0950-1000	VTE in hospitalised patients in Egypt. Missing the Obvious?	Prof Emad Hussein (Egypt)
1000-1010	Duration of Anti Coagulation post DVT	Dr Vasudeva Rao (Bengaluru)
1010-1030	Discussions	
0945-1130	Free Paper Presentation at Room 1-2	
1030-1130	Superficial Venous Disease - Session 1 Moderator: Dr Nick Morrison, Dr Mark Malouf, Dr Kursat Bozkurt, Dr Dheepak Selvaraj Panelist: Dr Vasudeva Rao, Dr Uldis Maurins, Dr Luis Rene A. V., Dr Sandeep Raj Pandey, Dr N. K. Malpani	
1030-1040	Superficial Vein Treatment: What we know and What we need to learn	Dr Nick Morrison (USA)
1040-1050	CrioLaser and CrioSclerotherapy(CLACS) with NdYag Microsecond Laser Microsclerotherapy	Dr Dmitry Rosukhovskiy (Russia)
1050-1100	Wavelengths, fibers or way of procedure performance for successful laser ablation? Lessons learnt from 15 years of experience	Dr Uldis Maurins (Latvia)

1100-1110	Superficial Reflux with Obstructed Veins When and when not to treat?	Dr Luc Moraglia (France)
1110-1130	Discussions	
1130-1200	Tea Break and Visit to Exhibition	
1200-1230	VAI Oration	
1200-1205	Introduction of Dr Devendra Dekiwadia (Rajkot)	Dr Shoaib Padaria (Mumbai)
1205-1225	TED King VAI Oration 2020 by Dr Devendra Dekiwadia (Rajkot)	
1225-1230	Felicitation of Dr Devendra Dekiwadia (Rajkot)	Dr Roy Varghese (Kerala)
1230-1330	<p>Sclerotherapy Symposium Moderator: Dr Pauline Raymond Martimbo, Dr Malay Patel, Dr Edwin Stephen, Dr D. Dekiwadia, Prof Tokan Sultanaliyev Panelist: Dr Dedy Pratama, Dr Patrianef Darwis, Dr Venkatesh Reddy, Dr Nurlan Ashimov</p>	
1230-1240	Guidelines and Consensus Document	Dr Juan A Chunga Prieto (Peru)
1240-1250	Microbubbles vs Macrobubbles: which one is better in small diameter Varices	Dr Pauline Raymond-Martimbo (Canada)
1250-1300	Foam Sclerotherapy: Comparison with other methods of treatment	Dr Luc Moraglia (France)
1300-1310	Fluoroscopy guided blocking of Saphenous Veins with Sclerotherapy – another point of view	Dr Louy Al Tarazi (Damascus)
1310-1320	Sclerotherapy in Venous Ulcer?	Dr Luis Rene A V (Bolivia)
1320-1330	Discussions	
1330-1430	Servier Young Researcher Presentation - Main Hall	
	Lunch Break and Visit to Exhibition	
1430-1600	<p>Deep Vein Symposium - Session 1 Moderator: Dr Alun H Davies, Dr Ajay Khanna, Dr S. A. Hussain Panelist: Dr Akshat Sharipov, Dr Manish Rawal, Dr K. K. Pandey, Dr Ashwin Bhammar</p>	

1430-1445	Role of Imaging in Iliac Vein Obstruction. Role of Duplex, CTV, Venogram and IVUs	Dr S Raju (USA)
1445-1455	Catheter Directed Thrombolysis for Ilio Femoral DVT: Determinants of outcome	Prof Emad Hussein (Egypt)
1455-1505	Venous Stenting in Post Thrombotic Syndrome/ Compression Syndrome	Dr Suat Doganci (Turkey)
1505-1515	What do Physicians think of the ATTRACT Trial ?	Dr Alun H Davies (UK)
1515-1525	DVT in contralateral limb due to Iliac Vein Stenting	Dr Robbie George (Bengaluru)
1525-1535	Dedicated Venous Stents. How are they different?	Dr Vinay Satwah (USA)
1535-1545	Iliac Vein Stenting. What is the evidence?	Dr Alun H Davies (UK)
1545-1600	Discussions	
1600-1630	Tea Break and Visit to Exhibition	
1630-1830	Free Paper Presentation at Room 1-2	
1630-1900	Moderator: Dr Sergio Ganeseni, Prof Evgeny Shaydakov, Prof Mark Whiteley Panelist: Dr Anjali Dawle, Dr Juan Chunga Prieto, Dr Sandeep Agarwal, Dr P Govindaraj, Dr Lokhare	
1630-1640	Management of Chronic Venous Insufficiency. Much more than treating Varicosities	Dr Rahul N S (Bengaluru)
1640-1650	Results of Retrospective study of neurological damage after Endovenous laser ablation	Dr Denis Borsuk (Russia)
1650-1700	Score system for recurrence possibility after laser treatment for varicose veins	Dr Imre Bihari (Hungary)
1700-1710	Saphenous sparing innovations: the difference among the technique and the strategy	Dr Sergio Ganesini (Italy)
1710-1720	Management of Superficial Vein Thrombosis	Dr Malay Patel (Ahmedabad)
1720-1730	Importance of Calf muscle in Venous Disorders	Prof J Uhl (Paris)
1730-1740	Thyroid Disease and Chronic Venous Insufficiency	Dr Shoaib Padaria (Mumbai)
1740-1750	Endovenous Treatment of patients with Venous Malformation	Dr Manish Rawal (Ahmedabad)

1750-1800	Long term results of preventive and veno preserving operations	Prof Evgeny Shaydakov (Russia)
1800-1810	High Intensity Focussed Ultrasound Therapy. New Kid on the Block	Prof Mark Whiteley (UK)
1810-1820	CLACS How I do it	Dr Ravul Jindal (Punjab)
1820-1830	Important Clinical trial in superficial vein disease - 2019	Dr Edwin Stephen (Oman)
1830-1900	Discussions	
1600-1700	Serdia Venous Ulcer meeting - Board Room, Mezzanine Floor	
2030-2230	Gala Dinner and Bollywood Night	



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Day 3 | 18th January, 2020, Saturday

TIME	SESSION	SPEAKER
0830-0940	Moderator: Dr Shoaib F. Padaria, Dr N. C. Liew Panelist: Dr Javier A. Serralde Gallegos, Dr Hemanth Kumar, Dr Avinash Katara, Dr A. T. Ranjish	
0830-0840	Important Clinical Trials in Deep Vein Disease in 2019	Dr Vimalin Samuel (Vellore)
0840-0850	Comparison of Endovenous Treatment to Vein Stripping and High Ligation for GSV Reflux	Dr Dedy Pratama (Indonesia)
0850-0900	Catheter Directed Thrombolysis in ilio Femoral DVT	Dr Patrianef Darwis (Indonesia)
0900-0910	Initial experience with Endovenous ablation treatment in Myanmar	Dr Kyaw Soe Win (Myanmar)
0910-0920	Managing Venous Ulcers after the EVRA Trial	Dr N C Liew (Malaysia)
0920-0930	Thermal Sclero-obliteration of veins using autologous plasma gel	Dr Akshat Sharipov (Qazaqstan)
0930-0940	Laser treatment of large varicose veins with 1560 nm Laser	Dr Nurlan Ashimov (Qazaqstan)
0930-1130	Free Paper Presentation at Room 1-2	
0940-1030	Keynote Address Session Moderator: Dr Andrzej Szuba, Dr William Repicci, Dr Shashi Gogia	
0940-0950	Introduction to LE & RN	Dr William Repicci (USA)
0950-1015	Key Note Lecture: Lymphedema - we are no longer helpless	Dr Stanley Rockson (US)
1015-1025	Felicitation of Dr Stanley Rockson	
1030-1130	Superficial Venous Disease - Session 2 Moderator: Dr Luc Moraglia, Dr Nick Morrison Panelist: Dr Vimalin Samuel, Dr R Sekhar, Dr Madhuri Gore	
1030-1040	The important factors to consider when formulating a treatment plan for your Varicose patients	Dr Mark Malouf (Australia)
1040-1050	European College of Phlebology guidelines for truncal ablation – what is new?	Dr Kursat Bozkurt (Turkey)

1050-1100	Endovenous Laser Ablation with 1940 nm Laser and Radial Fibers – 2 years follow up	Dr Uldis Maurins (Latvia)
1100-1110	May Thurner Syndrome: Multidisciplinary Management	Dr Javier A Serralde Gallegos (Mexico)
1110-1120	Saphenous and non Saphenous ablation with Turkish Glue	Dr Kursat Bozkurt (Turkey)
1120-1130	VeClose Five Year Follow up Study results	Dr Nick Morrison (USA)
1130-1140	Discussions	
1140-1200	Tea Break and Visit to Exhibition	
1200-1330	<p>Symposium on Pelvic Congestion Syndrome Moderator: Dr Ravul Jindal, Dr Roy Varghese, Dr Suat Doganci Panelist: Dr Pier Luigi Antigiani, Dr Gulshanjit Singh, Dr Devendra Singh, Dr Vinay Satwah, Dr Tarun Grover</p>	
1200-1210	UIP Consensus on Pelvic Congestion Syndrome	Dr Pier Luigi Antigiani (Italy)
1210-1220	Pelvic vein disorders -when and how to diagnose? How to classify? When is it clinically important?	Dr Sanjiv Lakhpal (USA)
1220-1230	Endovascular treatment options in Pelvic Venous Disorders	Dr Suat Doganci (Turkey)
1230-1240	PCS - Unknown aspects	Dr Louy Al Tarazi (Damascus)
1240-1250	Ovarian Vein Embolization. Step by Step	Dr Vimal Someshwar (Mumbai)
1250-1310	Long standing myths regarding venous hypertension in reflux and obstruction	Dr S Raju (USA)
1310-1330	Discussions	
1330-1430	Lunch Break and Visit to Exhibition	
1330-1430	<p>Lunch Session on Lymphedema Moderator: Dr Shashi Gogia, Prof Stanley Rockson</p>	
1330-1340	Pathophysiology and treatment approach	Dr Shashi Gogia (India)
1340-1350	Pharmaco-therapy in Lymphedema	Dr Andrzej Szuba (Poland)

1350-1400	CDT in Lymphedema	Dr Arun Rekha (Delhi)
1400-1410	Water Aquatic Compression protocols for phlebo-lymphedema patients	Dr Sergio Ganesini (Italy)
1410-1430	Discussions	
1430-1600	Deep Vein Symposium - Session 2 Moderator: Dr S Raju, Dr Sriram Narayan Panelist: Dr Rashad Bishara, Dr Fernando Vega Rasgado, Dr Sandeep Agarwal, Dr Sunder Raj Saravanan, Dr Rajiv Parakh, Dr Vijay Thakore	
1430-1440	Deep Venous Recanalization: Tools and Approaches	Dr R Sekhar (Mumbai)
1440-1450	Importance of stent shape and area on clinical outcome after Ilio Femoral Venous Stenting	Dr Sriram Narayan (Singapore)
1450-1500	How to manage a thrombosed IVC filter	Dr Deepak Selvaraj (Vellore)
1500-1510	Angio jet in DVT	Dr Vijay Thakore (Vadodara)
1510-1520	Discussions	
1520-1550	DEBATE: Iliac Vein Stenting in the context of Acute Ilio-Femoral DVT	
1520-1530	For the Motion	Dr Rashad Bishara (Egypt)
1530-1540	Against the Motion	Dr Rajiv Parakh (India)
1540-1600	Discussions	
1600-1630	Servier Young Researcher Award Ceremony - Main Hall	
	Tea Break and Visit to Exhibition	
1630-1800	Moderator: Dr Alexander Flor, Dr H S Bedi, Dr Nick Morrison, Dr. Nihar R. Prasad Panelist: Dr Imre Bihari, Dr Robbie George, Dr Shantano Kumar Ghosh, Dr G. S. Satish Kumar, Dr Dilip Rajpal	
1630-1640	Crossectomy and ENOF as alternative for SF insufficiency	Dr Carlos Arreola (Mexico)
1640-1650	Target specific Oral Anti Coagulants	Dr Sandeep Raj Pandey (Nepal)

1650-1700	Unwanted veins of the Forearm and hand – Treatment options	Dr Alexander Flor (Austria)
1700-1710	KlippelTrenaunay Syndrome: Newer Treatment Options	Dr Nick Morrison (USA)
1710-1720	Latest RCT – Looking at adjuvant benefit of Graduated Compression stockings in VTE Prophylaxis	Dr Alun H Davies (UK)
1720-1730	Comparision of Laser and Glue in Perforator Vein Treatment	Dr Imre Bihari (Hungary)
1730-1740	Venous Leg Ulcer Treatment- does pharmacotherapy matter?	Dr Srujal Shah (Ahmedabad)
1740-1750	Update on Negative Wound pressure Therapy or venous leg ulcer	Dr Shantano Kumar Ghosh (Bangladesh)
1750-1800	20 years experience of Coumarin Bandage in treatment of Venous Ulcers	Dr Fernando Vega Rasgado (Mexico)
1800-1810	Mexican experience with MOCA for Venous Insufficiency	Dr Fernando Contreras (US)
1810-1820	Innovative Therapies for the future	Dr Mark Whitely (UK)
1820-1830	Discussions	
1130-1300	Expert Meeting Advisory - Board Room, Mezzanine Floor	
1830-1930	AGM Venous Association of India	
2030-2230	Farewell Dinner - Pool Side Hotel Lalit Felicitation of Past Presidents of VAI and Industry Friends	



Day 4 | 19th January, 2020, Sunday

0830-0930	Registration & Tea/Snacks	
0930-0935	Introduction Dr Shoaib Padaria (Mumbai) Chairman, Organizing Committee VAICON 2020	Dr Shoaib Padaria (Mumbai)
0935-0945	Venous Association of India. Aim and Objectives	Dr Roy Varghese (Kerala)
0945-1115	Session 1 Moderator: Dr Sanjay Londhe, Dr Mahesh Kapadia, Dr Anil Mehta	
0945-1000	Prevalence of Vein Diseases in India	Dr R Pinjala (Hyderabad)
1000-1015	Anatomy of the Superficial and Deep Veins of the Legs with 3 D Imaging	Dr J F Uhl (Paris)
1015-1030	What are Varicose Veins? How do they occur? How is severity graded?	Dr Ravul Jindal (Chandigarh)
1030-1045	Role of Venous Ultrasound. How to perform. How to interpret?	Dr Tarun Grover (Gurgaon)
1045-1100	When in CT and MRI needed in Venous Diseases	Dr S B Desai (Mumbai)
1100-1115	Medical therapy for Varicose Veins. Which Drugs to use and when	Dr Pranay Pawar (Chandigarh)
1115-1145	Tea Break and Visit to Exhibition	
1145-1330	Session 2 Moderator: Dr Vishnu Mulchandani, Dr Atul Mashru	
1145-1200	Non-Thermal methods of treating Varicose Veins	Dr Vijay Thakore (Vadodara)
1200-1215	Thermal methods of treating Varicose Veins. Laser, Radiofrequency therapy and Steam	Dr Shoaib Padaria (Mumbai)
1215-1230	Deep Vein Thrombosis. Causes, Clinical Presentation. How to prevent it in your patients	Dr H S Bedi (Chandigarh)
1230-1245	Medical Management of Deep Vein Thrombosis	Dr Ajay Khanna (Varanasi)
1245-1300	Interventional Treatment of Deep Vein Thrombosis. When and how to perform	Dr D Dekiwadia (Rajkot)
1300-1315	What is Superficial Venous Thrombosis? How to manage?	Dr Malay Patel (Ahmedabad)

1315-1330	Pulmonary Embolism. All you need to know	Dr R Sekhar (Mumbai)
1330-1430	Lunch Break & Visit to Exhibition	
1430-1630	Session 3 Moderator: Dr Kaizer Barot, Dr Nisha Khushalani	
1430-1445	Role of Compression stockings in Vein disease. Which stocking to use and when	Dr Nihar R. Prasad (Hyderabad)
1445-1500	Venous Ulcers. How and why do they occur. How to differentiate from other ulcers	Dr Madhuri Gore (Mumbai)
1500-1515	Topical treatment (Ointments/Lotions, etc.) and dressings for Venous Ulcers	Dr Dheepak Selvaraj (Vellore)
1515-1530	4-layer Bandaging for venous ulcers. How to do it in your clinic	Dr Rahul N S (Bengaluru)
1530-1545	Venous Ulcers: Role of Negative Pressure Therapy	Dr Sriram Narayan (Singapore)
1545-1600	Newer Oral Anticoagulant drugs in DVT. How to use them in your daily practice	Dr V Balaji (Chennai)
1600-1615	Lymphedema of lower extremities. Why does it occur. How can it be treated effectively	Dr S B Gogia (Delhi)
1615-1630	Concluding remarks and Lucky Draw	Dr Shoaib Padaria (Mumbai)
1630-1700	Evening Tea and Collection of Delegate Bag and CME Certificates	

**For the treatment of symptoms & underlying cause of
Chronic Venous Insufficiency**

Legaches Aching Legs Calves
Legaches Aching Legs
Swollen ankles **Calves**
Aching Legs Swollen ankles
Swollen ankles Legaches Swollen ankles
Aching Legs Aching Legs
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1. Dezoflav Prescribing Information. Dec 2018. 2. Misra MC. Drug treatment of haemorrhoids. Drugs. 2005;65(11):1481-91.

IND296360 25 JAN 2019

Abbreviated Prescribing Information

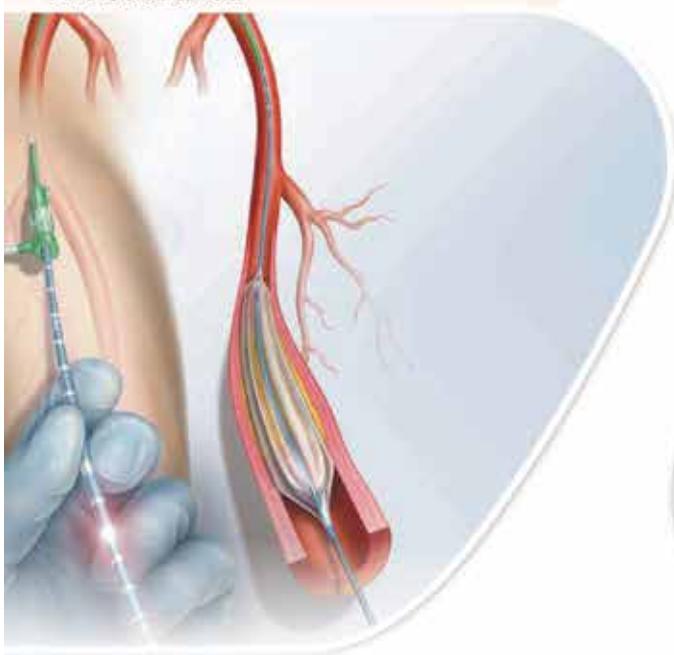
MICRONIZED PURIFIED FLAVONOID FRACTION OF RUTACEAE 1000 MG TABLETS DEZOFLAV 1000mg
LABEL CLAIM: Each film coated tablet contains: Micronized Purified flavonoid fraction of Rutaceae composed of Diosmin 900 mg, Flavonoids expressed as Hesperidin 100 mg. INDICATION: Acute hemorrhoid (piles). DOSAGE AND ADMINISTRATION For the treatment of acute haemorrhoidal attacks: MPFF 1000 mg 3 tablets daily for 4 days followed by 2 tablets daily for 3 days. For the treatment of haemorrhoids: the maintenance dose is 1 tablet daily for a duration according to the physician's discretion. CONTRAINDICATIONS: Hypersensitivity to the micronized purified flavonoid fraction or to any of the excipients. WARNINGS & PRECAUTIONS: Hemorrhoidal attack: The administration of this product does not preclude treatment for other anal conditions. The treatment must be short-term. If symptoms do not subside promptly; a proctological examination should be performed and the treatment should be reviewed. PREGNANCY AND LACTATION: Experimental studies performed in animals have not revealed any teratogenic effect. Moreover, no harmful effects have been reported to date in humans. Breastfeeding is not recommended during treatment. ADVERSE REACTIONS: Side effects reported with MPFF in clinical trials are of mild intensity. They consist mainly in gastro-intestinal events (diarrhea, dyspepsia, nausea, vomiting). Issued on: 24th December 2018 Source: Prepared based on full prescribing information, version v1.0, dated: 27th November 2018
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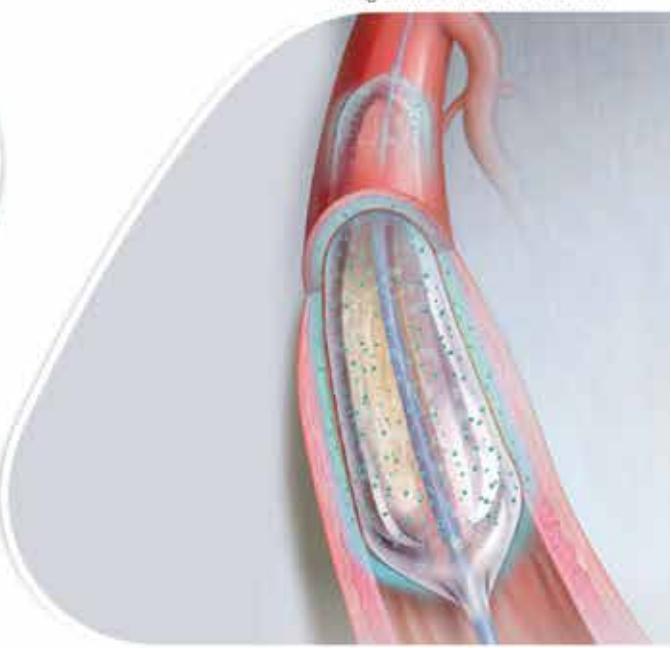
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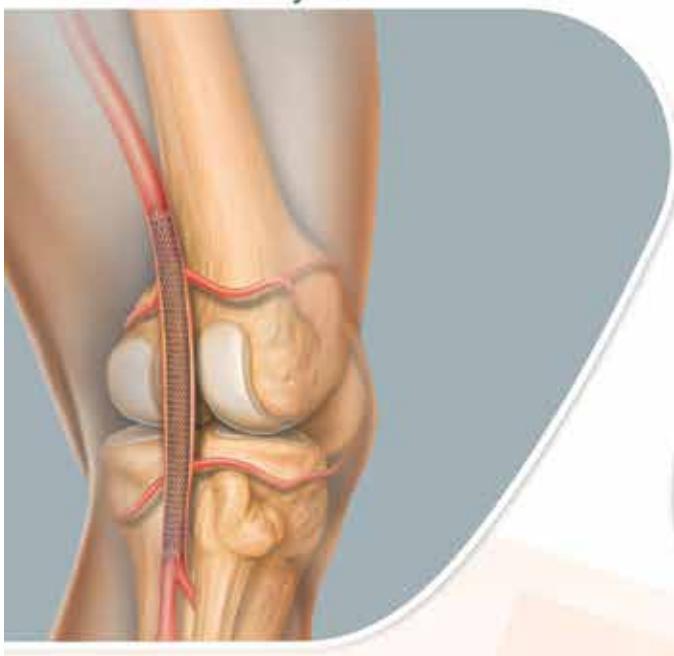
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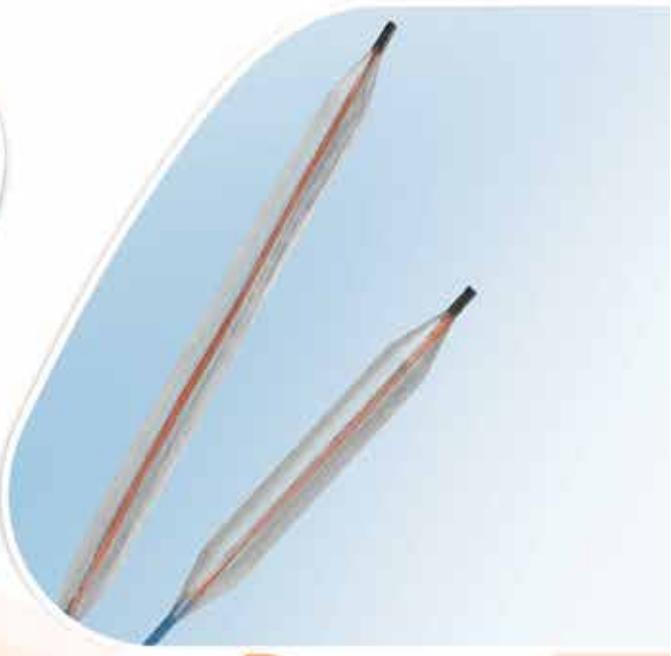
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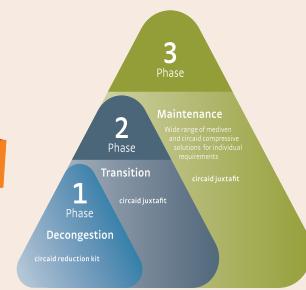
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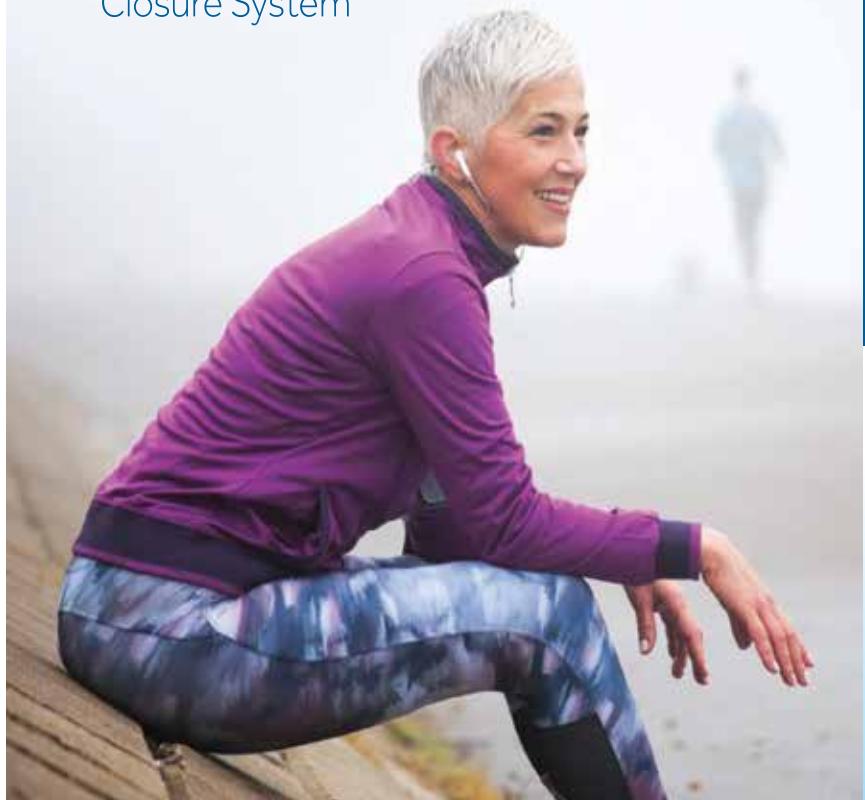
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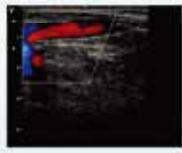
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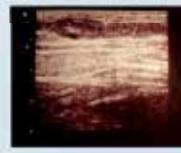
Great Saphenous Vein, Short Saphenous Vein, branch veins, phleangioma, perforating veins



Before the operation, the cavity of the large saphenous vein was enlarged and the blood flow showing colour.



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2 weeks after surgery, the strong ultrasonic echo light spot and band at the site of the lesion were shown on the transdimensional ultrasonography; the vessel wall thickens and became coarse, damaged entirely, vein fibrosis, the vascular cavity is completely blocked.



Before operation, the great saphenous vein of the affected limb was ultrasound showed blood flow. (transverse section)



On the second day after operation, the great saphenous vein become narrow, ultrasound showed no blood flow and strong light spot, no blood flow (transverse section).

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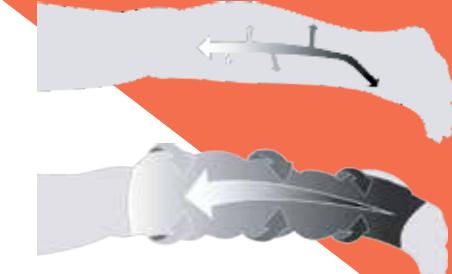
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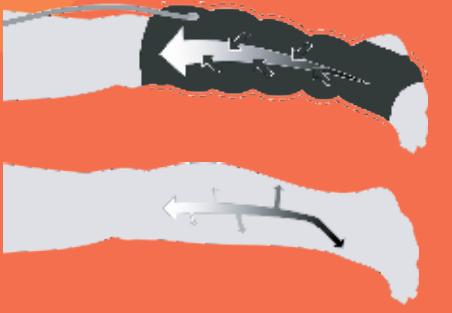


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Static inelastic compression is comfortable at rest and effective when walking around by enhancing your body's natural calf-pump to help return fluid from your legs to your heart.



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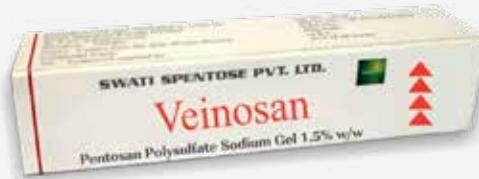
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DOSE & METHOD OF ADMINISTRATION : Apply a thin layer of VEINOSAN Gel over the affected area and its surrounding area several times daily (Recommended >4 times a day). Sparingly apply a thin layer of gel. Do not rub in. In case of leg ulcers apply only around the affected area. Do not apply to open wounds. The gel can be applied over longer periods of treatment.



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ULTRASOUND GUIDED SUBFASCIAL LASER ABLATION OF PERFORATORS

Authors: Kachare M, Kulkarni S

Miraj

Objective

Endovenous laser ablation (EVLA) is a well established treatment for chronic venous insufficiency. There is strong evidence that interruption of incompetent perforators minimizes the long-term sequelae of chronic venous insufficiency and reduces the recurrence rate of venous stasis and ulceration. It is logical to assume that definitive sonographically guided endovenous perforator ablation should yield at least similar clinical results compared to those found with SEPS. We are presenting largest study about the ultrasound guided subfascial Laser ablation of perforating veins along with saphenous veins in the single setting by EVLA.

Material And Methods

Over two years from jan 2016- dec 2018 in 350 patients 3880 perforators were treated by ultrasound guided Laser under spinal anesthesia along with saphenous veins in single centre by team of radiologist and surgeon. The patients with abnormal perforator diameter [>3.5mm] or reflux were treated .In addition patients with clinical, etiologic, anatomic, pathophysiologic (CEAP) classes of 4 through 6 were also included in the study. In all the patients the perforators were punctured with 16 G Jelco under real time ultrasound guidance. This is a prospective study to determine whether EVLA could be used to solely to treat perforators.

Results

In all the patients single puncture was sufficient. 250-350 joules energy was given depending on the dia. of the perforator. Treatment was successful in 3635 perforating veins (93.68%) in first setting , the residual perforators were treated in second setting resulting in 100% obliteration. After treatment, ultrasound surveillance within the next few days confirmed that the perforators were all occluded. Bruising noted at the site treated perforator . There were no late complications..

Conclusion

All the diseased perforators can be treated by EVLA along with saphenous veins in all the cases without any significant complications. It is safe , cost effective with a comfortable recovery while maintaining minimally invasive treatment.

ACUTE MASSIVE AND SUBMASSIVE PULMONARY THROMBOEMBOLISM: OUR EXPERIENCE WITH SURGICAL MANAGEMENT

Authors: Suryawanshi S, Raut C, Mishra P, Khandekar J

Lokmanya Tilak Medical College, Mumbai

Objective

Traditionally, Surgical Pulmonary embolectomy is performed only for hemodynamically unstable patients and those with massive pulmonary thromboembolism^{1..} We analysed the results of surgical pulmonary embolectomy performed in our centre in the last seven years.

Design and Methods

Data was retrospectively studied of 56 patients who underwent pulmonary embolectomy in our institute from 2012 to 2019. Preoperative data included demographic variables, symptoms, preop circulatory collapse, history of Deep vein thrombosis, previous thromboembolism and previous thrombolysis. Preop venous Doppler, echocardiogram and CT pulmonary angiography were noted. Details of surgical technique were noted. Post operative mortality, ICU stay, extubation time, neurologic and renal dysfunction were noted. Post op CT findings and medications at discharge were noted.

Results and Conclusions

Of the cohort, 88% were males. Mean age was 51 yrs (41-68 yrs). Onset of pulmonary embolism during hospital stay was 27% and 13% patients had previous admission for pulmonary thromboembolism. 85% patients had dyspnoea at rest and 45% had chest pain. Haemoptysis was present in 19%. 40% had haemodynamic instability presenting with circulatory collapse. 16% patients had clinical evidence of Deep Vein Thrombosis as pedal edema. However 88% had Deep vein thrombosis on venous color Doppler. 13% patients had previous admission for pulmonary thromboembolism which was treated non operatively. Echocardiogram showed Right Ventricle dilatation and Right Ventricle pressure overload pattern in 81% patients. Right Atrium thrombus was noted in 8% of patients. Most importantly, 70% patients had received systemic thrombolysis therapy but did not recover and were taken up for surgery. Mortality was 3.5% in our study. 7% patients had post op renal dysfunction and none had neurologic dysfunction. Postoperatively CT revealed 90% (49) patients having complete resolution of thrombus. All patients were started on oral anticoagulation with target INR 2-3 at discharge.

Surgical pulmonary embolectomy is a life saving procedure for massive Pulmonary thromboembolism. In addition, patients submassive Pulmonary thromboembolism with failed thrombolysis also benefit from surgery. It can be performed effectively at centres with Cardiopulmonary bypass facility. Mortality has reduced significantly. Role of anticoagulation for lifelong anticoagulation needs to be investigated.

FACTORS AFFECTING THE LONG-TERM PATENCY OF ARTERIOVENOUS ACCESS FOR HEMODIALYSIS: A SINGLE CENTER EXPERIENCE

Authors: A K M Panadian

MSR Medical College

Objective

To analyze and evaluate the possible factors in the long-term patency of arteriovenous access for hemodialysis.

Methods

A cross-sectional study recruiting patients from October 2018 to September 2019. All patients who have a working hemodialysis vascular access, either Arteriovenous fistula or Arteriovenous graft which has been working for at least 2 years were included and collected demographic data along with other parameters like timing of creation, interventions, dialysis sessions, antiplatelet therapy among others.

Results

We included 81 patients with AV access patent more than 2 years; 22.5% were aged >65 years, 39.6% were diabetic, 68.5% were hypertensive, and 26.1% had peripheral vascular disease. Analysis revealed that the significant factors affecting the patency of AV access were the use of jugular catheter for long duration, maturation time, age, antiplatelet therapy, current tobacco usage, dialysis sessions per week, single center dialysis.

Conclusion

Our study suggests that any AV access should have adequate maturation time before dialysis as well as its adequate monitoring are essential for maintaining patency. All the variables of the study have been observed and final analysis is ongoing which will be presented in the conference.

STUDY OF PATENCY RATES , OUTCOMES AND FACTORS MODIFYING PATENCIES OF AV FISTULA SURGERIES : 4 YEARS EXPERIENCE AT SINGLE CENTRE

Authors: A K M Panadian

MSR Medical College

Aim

Arteriovenous fistula (AVF) failure to mature and early thrombosis contribute to excessive dependence on central venous catheters for haemodialysis. Choosing the most appropriate vascular access site for an individual patient is guided largely by their age, smoking, co-morbidities and anatomical variations. This study aims to evaluate patency rates of AVF and to correlate factors associated its failure.

Methods

A prospective study was designed that included all patients undergoing AVF creation in 1139 patients. 1168 AVF's done over a period of 4 years were followed for a period of 1 year from July 2015 to June 2018 in a single centre, MS RAMAIAH MEDICAL COLLEGE AND TEACHING HOSPITAL, Bangalore.

Results

A total of 1139 patients had AVF surgery, their outcomes recorded and were included in the analysis. 1168 AVF creations were done of which primary patency rates achieved were 89%, 87.25%, 83.5% at 3 months, 6 months and 1 year respectively. Primary failure rate was 7.7%.

Conclusions

In this study of primary AVF creation, patients were assessed from the time of AVF creation, before initiation of HD and also after initiation of HD till a period of 1 year and found to have good primary patency rates. However it was also noted that complications, technique of puncture, single center versus multi center HD, number of HD per week and other comorbidities played a pivotal role in patency of AVF.

ENDOVENOUS RADIO FREQUENCY ABLATION VERSUS CONVENTIONAL OPEN SURGERY FOR PRIMARY VARICOSE VEINS: A PROSPECTIVE SINGLE CENTER EXPERIENCE OVER 4 YEARS

Authors: A K M Panadian

MSR Medical College

Aim

Various studies have shown that stripping of varicose veins is associated with increased morbidity in terms of bruising, hematomas, pain, wound infection, delayed recovery and return to work. This study aims to compare outcomes between Radio Frequency Ablation Vs conventional surgery for varicose veins.

Methods

This prospective study was done over a period of four years from 2015 to 2018 with a total sample size of 230 patients with symptomatic varicose veins (CEAP 2-6) in a single Centre, MS Ramaiah medical college and teaching hospital, bangalore. Patients who fulfilled the inclusion criteria underwent either RFA (group 2) or Open varicose vein surgeries (Group 1). Post operatively these patients were followed up for a period of one year and various outcomes as postoperative pain, duration of hospital stay, procedure time , early return to activities and complications as wound infection, and recurrence were recorded.

Results

RFA resulted in successful ablation of varicose veins in all patients. RFA took less time to perform than open surgery (RFA – 40.8 mins) and these patients also experienced less post-operative pain. It was noted that Duration of hospital stay (RFA – 26.4 hrs) was also reduced in RFA group including return to normal activities (RFA – 5.25 days) which was much earlier when compared to (12.125) open surgery group. Over all the satisfaction of patient was also better in RFA group.

Conclusions

Conventional open surgery with stripping for varicose veins is in usage for a long time now. In this single centre experience we have noted that RFA is a better option in appropriately selected group of patients in terms of less morbidity, less post-operative pain and requirement of analgesia, also with a less hospital stay, and early return to normal activities. In this era of endovenous procedures, RFA is the most ideal treatment option for varicose veins and can be performed quicker and much safer in expert hands.

ENDOVENOUS RADIO FREQUENCY ABLATION VERSUS CONVENTIONAL OPEN SURGERY FOR PRIMARY VARICOSE VEINS: A PROSPECTIVE SINGLE CENTER EXPERIENCE OVER 4 YEARS

Authors: Naveen R

Sri Ramachandra Medical College

Aim

Various studies have shown that stripping of varicose veins is associated with increased morbidity in terms of bruising, hematomas, pain, wound infection, delayed recovery and return to work. This study aims to compare outcomes between Radio Frequency Ablation Vs conventional surgery for varicose veins.

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Results

RFA resulted in successful ablation of varicose veins in all patients. RFA took less time to perform than open surgery (RFA – 40.8 mins) and these patients also experienced less post-operative pain. It was noted that Duration of hospital stay (RFA – 26.4 hrs) was also reduced in RFA group including return to normal activities (RFA – 5.25 days) which was much earlier when compared to (12.125) open surgery group. Over all the satisfaction of patient was also better in RFA group.

Conclusions

Conventional open surgery with stripping for varicose veins is in usage for a long time now. In this single centre experience we have noted that RFA is a better option in appropriately selected group of patients in terms of less morbidity, less post-operative pain and requirement of analgesia, also with a less hospital stay, and early return to normal activities. In this era of endovenous procedures, RFA is the most ideal treatment option for varicose veins and can be performed quicker and much safer in expert hands.

ILIAC VEIN STENTING IN ILOFEMORAL DEEP VEIN THROMBOSIS POST CATHETER DIRECTED THROMBOLYSIS

Authors: Jagan J, Raju R.

SRMC

Aim

To determine the outcomes of iliac vein stenting in the acute and subacute period, of patients with iliofemoral deep vein thrombosis (IFDVT) post catheter directed thrombolysis. To compare the symptom severity with patients who did not undergo stenting for iliac vein lesion after catheter directed thrombolysis.

Materials And Methods

A prospective, case control, single centre analysis of 45 patients (31 men, 14 women; median age, 44 years) with iliac vein compression who underwent iliac vein stenting was carried out. 44 patients presented with acute IFDVT and underwent catheter directed thrombolysis. Patients were stented in the acute phase (Group1: N= 17) if the thrombus resolution was complete and in the subacute (after 4-6 weeks) phase (Group 2: N= 12) if thrombus resolution was incomplete. A third group of patients who did not undergo stenting for iliac vein compression were considered as controls (Group 3: N= 15). Non thrombotic iliac vein lesions were not excluded from the study. The symptoms of the three groups were recorded by the venous clinical severity score (VCSS) and development of post-thrombotic syndrome (PTS) was assessed by the Villalta score. Comparison between the three groups was carried out by the one-way Anova test and post-hoc analysis by the Mann-Whitney test.

Results

Initial technical success was achieved in 44 of 45 patients. The primary patency rate at 1 year was 86.2% (Group 1-82.3%, Group 2- 90.9%). The mean follow-up period was 2 years. Demographics were similar between the groups. There was a significant improvement in the VCSS score in the subacute stenting group compared to the control group($P=.003$). No difference was noted in patients stented in the acute phase and controls($P=.110$). There was no difference in symptoms improvement between patients stented in the acute and sub-acute phase of IFDVT($P=.210$). 36.9% of patients developed PTS after stenting. There was no difference in the incidence of PTS at 2 years in either of the three groups ($P=.112$).

Conclusion

Endovascular reconstruction of stenosed iliac veins can be carried out in both the acute and subacute phases of IFDVT post catheter directed thrombolysis without a change in the incidence of PTS. Subacute stenting of patients shows better symptom improvement compared to stenting in the acute phase.

QUALITY OF LIFE AFTER CATHETER DIRECTED THROMBOLYSIS AND STANDARD ANTICOAGULATION FOR ILOFEMORAL DEEP VEIN THROMBOSIS IN INDIA

Authors: Jagan J

SRMC Hospital

Aims

India has many younger patients presenting with ilio-femoral deep vein thrombosis (IFDVT). There are no studies evaluating the outcomes of catheter directed thrombolysis in these ideal group of patients. The aim is to determine the quality of life after catheter directed thrombolysis in these patients compared to standard anticoagulation.

Materials and Methods

A prospective, non-randomised, case control study of patients who presented with acute, primary IFDVT to a tertiary care hospital in south India. Patients with iliac and femoral deep vein thrombosis, confirmed by CT venogram were included. Patients with femoral deep vein thrombosis were excluded. Acute presentation less than 14 days were included. Post-thrombotic syndrome (PTS) was assessed by the Villalta score. A pilot study conducted puts the incidence of PTS at 25%. A sample size of 48 each was required to reach 90% power with 5% alpha error. Disease specific QOL was measured by Venous Insufficiency Epidemiological and Economic Study (VEINES) -QOL/Symptoms and health related QOL by the EuroQOL(EQ)-5D questionnaires.

Results

A total of 189 patients presented with acute IFDVT between 2015 and 2018. 51 patients did not meet the inclusion criteria. 131 patients were followed up for a minimum of 2 years. 18 patients died during the follow-up period. Villalta score and QOL scores for 49 CDT patients and 51 patients managed conservatively were recorded and compared. Demographics were comparable between the groups.

PTS developed in 29% of patients (18% vs 39%, p=0.035). The QOL calculated by VEINES- Sym/ QOL (mean 74.29 vs 70.14, p=.006) and EQ-5D (mean 0.50 vs 1.76, p= .004) showed significant difference. Both scores were significant for PTS versus no PTS (p= <0.001). Absolute risk reduction (ARR) was 20.8% with a number needed to treat of one in five.

Conclusion

Catheter directed thrombolysis reduces the incidence of PTS and improves the health related and disease specific quality of life in a younger population of patients with acute iliofemoral DVT, compared to standard treatment with anticoagulation alone.

VITAMIN D AND ITS ROLE IN VENOUS DISEASES - A PROSPECTIVE STUDY IN A TERTIARY CARE CENTRE IN SOUTH INDIA

Authors: Ravichandran M P, Subramaniyan S R, Marun Raj G

Saveetha Medical College

Introduction/Objective

VitaminD and Parathormone (PTH) play an important role in endothelial homeostasis apart from its role in Calcium and Phosphorus metabolism. VitaminD deficiency has been implicated as a contributory factor in the development of Cardiovascular Disease, with very few studies showing its relationship with Venous Diseases among South Indian Population and moreover no study has taken PTH into consideration. This study intends to assess:1.Correlation between vitaminD levels and Venous diseases 2.Whether PTH levels have an Impact on relationship between VitaminD levels Venous Diseases

Design And Methods

A Cross sectional, Prospective,Comparative study was done on 50 consecutive patients attending our OPD with Venous Disease and 50 Healthy Volunteers after Ethical Committee approval. Patients with Venous Disease were stratified into Varicose Veins(GroupA) and DVT (GroupB) based on Clinical grounds and routine duplex imaging. VitaminD & PTH levels were measured by chemiluminescent immunoassay(CLIA),and relevant demographic data was collected. PTH levels were assayed to rule out Secondary hyperparathyroidism ($>68\text{pg/ml}$). VitaminD deficiency($<20\text{ng/ml}$) was classified according to Lips classification. Patients with PAD and CKD were excluded. Statistical Analysis was done using Sigma Plot software. One way ANOVA, Student Newman Keul's multiple comparison test and Fischer Exact test were employed.

Results

Sufficient and deficient VitaminD levels were 48/52%;52/48%among Control and Venous Diseases respectively (Fig.1). Among Venous Diseases number of patients with Varicose Veins(Group A)and DVT (Group B) were 68/32% respectively, sufficient and deficient levels were 64.7/35.2% and 25/75% respectively($p=0.015$)(Fig.2),Severe deficiency was 16/42% respectively. PTH levels were elevated in 2/6% among Control and Venous Disease respectively ($p <0.001$) of which among Venous Diseases 33.3/66.7% belonged to GroupA and GroupB respectively (Fig.3)

Conclusion

1.Deficiency of VitaminD was almost equal between Control and venous group,probably because of reduced exposure to Sunlight owing to increase in Sedentary lifestyle.

2.Deficiency of VitaminD was more in DVT group which may show a causal relationship between Vitamin D levels and Anatomical level Of disease involvement

3.PTH was proportionately elevated in DVT group,thereby PTH elevation implies need for suspicion of Deep venous system involvement in patients with VitaminD deficiency.

This Study is underpowered in terms of stratified disease specific sample size and needs Multicentric/ Single centre study with more sample size

- a. to assess if VitaminD supplementation can limit/alter disease progression,influences wound healing in patients with venous ulcers;provides symptom relief along with other medications
- b. to establish that as a part of disease process,in patients with VitaminD deficiency Elevated PTH implies need to assess/suspect Deep Venous System involvement
- c. to assess Relationship between VitaminD levels and disease severity based on standard classification systems.

TWO ARM PARALLEL DESIGN SUPERIORITY RANDOMIZED TRIAL COMPARING PENICILLIN & STANDARD OF CARE VS STANDARD OF CARE ALONE IN ACHIEVING HEALING OF LEG ULCERS IN PATIENTS WITH CHRONIC VENOUS HYPERTENSION.

Authors: Kumar N, Dhar A, Srivastava A, Pandey R, Kumar R, Ranjan P, Thulkar S, Kumar M

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Background

Chronic ulcers are one of the most difficult to treat diseases. Ulcers have a socioeconomic impact, due to pain, recurrence and morbidity. Treatment requires management of varicose veins, by compression therapy along with Surgical and endovascular procedures as it counteracts venous reflux and hypertension. Venous hypertension leads to oedema followed by micro lymphangiopathy and dermatolymphangitis, which is attributed to recurrence. Inj. benzathine penicillin has been proven beneficial in treating lymphangitis.

Objective

This study was performed to compare the quality of life & reduction in the size of the ulcer, recurrence rate, pain score in patients receiving standard care for chronic venous ulcer with and without concomitant treatment with Inj Benzathine penicillin 1.2 mega units IM every 14 days for 3 months followed by 3 weekly for 3 months.

Design And Methods

The current randomised, two-arm superiority trial was conducted among 67 patients(aged 18-70 years, with Pregnancy, Acute DVT, PAD, T2DM, allergy to penicillin, deep venous system agenesis, connective tissue disorders ruled out), with cumulative 81 venous ulcers. Participants were randomly divided into two arms, one arm received Standard of Care(SoC) and others received Inj Benzathine Penicillin with SoC. SoC included wound biopsy for HPE, C/S, Bandaging/stockings, wound&foot care, antibiotics, limb elevation, tab flavonoids, wound measurement. Patients were followed weekly for 1 month followed by monthly for 6 months.

Results

After the 26-week intervention, compared with SoC, Penicillin Inj. was associated with faster healing rates, a significant reduction in recurrence. In addition, pain control, improvement in the quality of life is significantly different from changes in SoC.

Conclusions

Inj. Benzathine Penicillin administration among chronic venous recurrent ulcers had beneficial effects on parameters of ulcer size, QoL, recurrence and pain.

PREVALENCE OF MULTIMORBIDITY IN PATIENTS WITH CHRONIC VENOUS DISEASE

Authors: A Vishwanath

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Multi-morbidity has become the new pandemic, with a rise in the number of patients presenting with two or more medical conditions. Management of these patients is challenging with high utilisation of healthcare resources, polypharmacopia, drug interactions and adverse health outcomes. The aim of this study was to understand the prevalence of multimorbidity in patients presenting with chronic venous disease (CVD).

Methods

Electronic medical records of all patients who visited the vascular department with signs and symptoms of chronic venous disease between January 2015 to July 2019. were reviewed. Structured proforma was used to collect data regarding their existing medical conditions in addition to CVD. Descriptive statistics were used, and Data was analysed using Excel 2016.

A total of 8018 patients were included in the study with a mean age of 50.61 (range 14–94). 4659 patients were men (58.11%). 5366 patients (66.92%) presented with bilateral CVD. 1595 patients (19.89%) and 1057 patients (13.18%) presented with isolated left and right leg CVD respectively. Majority of the patients were in CVD 4 (40.38%) followed by CVD 2 (28.77%) clinical stages. 2814 patients (35.09%) did not have any co existing health conditions. The remaining 5204 (64.91%) patients had one or more health conditions in addition to CVD. The most common medical condition was Hypertension (HTN) (32.43%, 2600) followed by Diabetes Mellitus (DM) (20.02%, 1605), Hypothyroidism (13.67%, 1096), osteoarthritis (4.98%, 399) and Ischemic heart disease (IHD) (4.03%, 323). 292 patients (3.64%) had past history of deep venous thrombosis. Conditions that were present in less than one percent of the patients include cerebral vascular disease (CVD), Chronic kidney disease (CKD), Chronic liver disease, peripheral vascular disease and Migraine.

Conclusion

The results of the study show that majority of CVD patients (65%), in India, have one or more co existing medical conditions. In spite of DM and HTN being the commonest co-existing medical conditions, the prevalence of CVD, CKD and PVD were less than one percent in these patients. Physicians and surgeons involved in the care of such patients need to be aware of their specific requirements.

TO STUDY THE EFFICACY OF RADIOFREQUENCY ABLATION OF PERFORATORS IN HEALING OF VENOUS LEG ULCERS

Authors: Shetty A, Sekhar R

Kokilaben Dhirubhai Ambani Hospital, Mumbai

Introduction

Incompetent superficial veins are the most common cause of lower extremity superficial venous reflux and varicose veins. However, incompetent or insufficient perforator veins are a very common cause of recurrent varicose veins after treatment. Perforator vein insufficiency can result in pain, skin changes, and recurrent ulcers, and often merit intervention. Current minimally invasive treatments have replaced traditional surgical treatments. Options include ultrasound guided sclerotherapy (USGS) and endovascular thermal ablation EVTA with either laser or radiofrequency energy sources. Procedure related side effects with foam sclerotherapy like associated ankle edema, phlebitis and skin necrosis are well noted.

Aim

To assess the efficacy of thermal perforator ablation on healing of chronic venous leg ulcers

OBJECTIVES

- To assess complete healing of the ulcer post procedure.
- To evaluate whether procedure related side effects are lesser compared to other available methods

Methods

Patients of either sex above 18 years of age with primary C6s varicose veins coming to Kokilaben Hospital for surgical management, having perforator incompetency (as per American Venous Forum Guidelines) on venous Doppler study were offered perforator ablation using the F-care probe along with standard GSV ablation (in case of GSV incompetence if any)

They were followed up serially for a period of one month. At the end of month, complete healing of the leg ulcer, associated inflammation, ankle edema and recanalization on follow up Duplex scan was assessed. These patients also had to continue standard compression dressing post-surgery

Results

20 patients were followed up for a period of three months. At the end of three months post procedure, all patients who followed up showed complete healing of the ulcer. Duplex scan at the end of one month and three months follow up showed that the perforators continued to remain closed. Associated procedure related side effects like ankle edema, phlebitis, skin necrosis was lesser as compared to other modalities like foam sclerotherapy. No adverse events were noted

Conclusion

Standard GSV ablation fails to address underlying venous hypertension caused due to perforator incompetence. In a properly selected cohort of patients, the F- care probe is an excellent tool for assisted wound healing with minimal adverse events. However, larger numbers and longer follow up period is required to validate its use in all patients.

A RARE CASE OF PERFORATOR VEIN ANEURYSM (PVA)

Authors: Nishan B

Bhagwan Mahavir Jain Hospital, Bengaluru

Introduction

Venous aneurysms can be defined as persistent isolated dilation of twice the normal vein diameter. The aim of this study is to present the incidental findings of Perforator Vein Aneurysm (PVA) in a young male and to discuss the clinical outcome

Case Report

A 41 year male presented with a history of fall on left knee, on evaluation clinically has no local symptoms, duplex ultrasonography and CT angiography, an incidental finding of fusiform perforator vein aneurysm connecting popliteal vein and superficial vein at the level of left popliteal fossa. Underwent open tangential perforator vein aneurysmectomy through a posterior approach in the left popliteal fossa. Histopathology examination reported fragments of soft tissue with sections of dilated veins, irregular in shape .

Conclusion

PVAs are unusual vascular malformations that occur equally between the sexes and are seen at any age. Diagnosis is made by duplex ultrasound and CT angiography. This entity is relatively benign, and most of patients are incidentally detected and asymptomatic. Asymptomatic patients are frequently observed based on size of aneurysm. Large asymptomatic aneurysms, symptomatic aneurysms (local, systemic) needs to be excised. Role of anticoagulation is controversial.

STEAL: UNUSUAL COMPLICATION OF IATROGENIC ARTERIOVENOUS FISTULA

Authors: Harita K, Suresh G, Devender Singh

Yashoda Hospital

Background

Most common cause of iatrogenic AVF is following percutaneous interventions. They mainly present with features of hyperdynamic circulation, Steal is a very rare complication.

We intend to report 2 cases with unique history and steal complication. Case 1-67 yrs thin built man presented with rest pain, ischemic ulcer 3x4cm on distal 1/3rd left leg-1 month duration. He had history of blood sampling from left groin. Clinical examination revealed thrill in left groin, bruit on auscultation. 2D echo was insignificant. CTA revealed fistulous communication between profunda femoris artery and femoral vein. Patient underwent groin exploration and simple ligation of fistula. Rest pain came down, patient became ambulatory and ulcer improved with debridement and medication.

Case 2-23 yrs male presented to us with right upper limb venous hypertension, gangrenous patch of 10x14 cm since 3 months, rest pain since 1 month. Patient gave history of gunshot injury to right side of chest and repeated exploration of chest and right arm. 2D echo was normal. CTA-Right subclavian artery-vein fistula with 4x5 cm pseudoaneurysm of subclavian artery along with proximal brachial artery-vein fistula. He underwent percutaneous subclavian artery stenting with fluency 8mmx10cm. Later date debridement of gangrenous patch. His rest pain improved and is symptomatically better.

Conclusion

Steal phenomenon is relatively unknown in iatrogenic fistulas. High degree of suspicion and timely intervention can save limb.

PERSISTENT HICCUPS - A RARE COMPLICATION OF INFERIOR VENA CAVA STENTING

Authors: Jithin Jagan

SRMC

Background

Persistent hiccups are seen with stenting of oesophagus in malignancy however this complication is not associated with inferior vena cava stenting (IVC). Hiccups have not been reported after IVC stenting. We present a case of redo supra- hepatic IVC stenting for with the patient developing persistent hiccups in the post-operative period.

Case Report

A 41-year-old male patient with Budd Chiari syndrome for 20 years underwent IVC stenting a year back for IVC stenosis. Patient developed stent migration and underwent re-stenting. Post-operatively patient developed persistent intractable hiccups which were not controlled by regular medication for a week. Use baclofen in oesophageal stenting has shown to reduce hiccups and was tried in our patient. His hiccups subsided and patient is symptom free for 6 months and on regular follow-up.

Conclusion

Persistent hiccups is a complication of supra hepatic IVC stenting. Phrenic nerve compression by the stent could be the cause. Baclofen seems to be effective in these patients.

PLATELET INDICES CORRELATION AND ITS ASSOCIATION WITH SUSCEPTIBILITY TO DEVELOP DEEP VEIN THROMBOSIS

Authors: Vaibhav K

Banaras Hindu University

Introduction

Platelets play a key role in hemostasis and thrombosis. Activated platelets release granule contents, which include platelet soluble agonists and adhesive proteins that greatly amplify platelet activation and help recruit circulating platelets to the site of vascular injury.

Larger mean platelet volume is an indicator of increased in vivo platelet activation. The mean platelet volume correlates with platelet activity whether measured as aggregation, thromboxane A2 or 3-thromboglobulin release, or adhesion molecule expression. Notably, larger platelets are haemostatically more reactive and prone to the development of thrombosis than platelets of normal size.

Aims & Objectives

To evaluate platelet function and morphology in deep vein thrombosis and identify high risk patients among general population.

Material & Methods

Total number of 33 cases and 33 controls included in study. Patients with acute DVT, confirmed by Duplex scan were included and those on antiplatelet/anticoagulant therapy were excluded. Beckmann Coulter analyzer used for CBC, MPV, RDW, PDW, PCT, P-LCC, P-LCR.

Observation & Results

On comparison of all platelet indices- TLC, RDW, MPV, PDW and P-LCR were raised in case group as compared to control group. Correlation study showed that MPV is directly related to PLCR and inversely related to platelet count. Platelet count is directly related to PCT and PLCC. ROC analysis of all platelet indices gave a cut-off value to identify DVT patients. All cases were divided in two groups, one group having less than that cut-off and other group having more than that cut-off value. All platelet indices were further compared with these two groups and significant results were obtained. Platelet count was significantly raised in patients with MPV<9.25fL. P-LCC was significantly raised in patients with platelet count >2.4 lac. TLC, MPV and P-LCR were raised in patients with platelet count <2.4 lac. Platelet count and P-LCC were raised in patients with plateletcrit >20%.

Conclusion

Platelet derived microparticles are 3-4 times raised in patients with DVT. Combination of various platelet indices with D-dimer can increase detection sensitivity of DVT even in the absence of duplex scan and can be used as OPD basis. Platelet aggregation test is not a reliable test to identify high risk patients of DVT.

TREATMENT OF VARICOSE VEINS WITH EVLA (1470 NM) USING LOW LINEAR ENDOVENOUS ENERGY DENSITY

Authors: Gorski U, Sangma S, Yadav M, Sandhu MS

PGIMER Chandigarh, AIIMS New Delhi

Introduction

Chronic venous insufficiency is a very common disease causing significant morbidity in the Indian population. We carried out this study to assess the efficacy of EVLA with 1470 nm laser using low linear energy density (LEED) less than 80 J/cm

Methods and Materials

A prospective study was conducted in a total of 78 limbs with GSV incompetence using low LEED below 80 J/cm. The occlusion rate, improvement in CEAP and VCSS, ulcer healing rate, improvement in symptoms and patient satisfaction were assessed for a minimum period of 6 months and maximum period of 30 months. The complication rate and recurrence of disease were also assessed using both objective as well as subjective parameters. Results showed that the occlusion rate was 96.1%; there was up gradation of CEAP score by one or two grades by a period of one month in around 75 % cases and rest by a maximum period of 3 months. Ulcer healing rate was seen in more than 91 % patients. Over 95 % confirmed improvement of symptoms within a period of 3 months and patient satisfaction being 98%. The post procedure pain was minimal and less than 50 % requiring NSAIDS immediately post procedure. Bruising was found in less than 30 % patients. No superficial burns were encountered. DVT was encountered in 2% of patients. No major complications like pulmonary embolism and arterio-venous fistula were encountered. Two patients had segmental recanalisation of GSV after a period of 18 months. One patient had recurrence of symptoms and down gradation of CEAP score.

Conclusion

EVLA with 1470 nm using low LEED is an effective mode of treatment for varicose veins with lesser complications and similar venous occlusion rate with higher LEED>90 J/cm. No significant recanalisation of GSV was encountered; however a longer period of follow up will be required to determine incidence of recanalisation and recurrence of disease.

A STUDY OF QUALITY OF LIFE IN PATIENTS WITH VENOUS LEG ULCER

Authors: Kumar M, Singh T, Tiwary S, Khanna A

Banaras Hindu University

Introduction

In spite of major advances in management of venous leg ulcer, complete healing and recurrence still stand as a challenge. Various studies have pointed out that patients with venous leg ulcer often experience functional disability and emotional distress, which negatively affects patients quality of life.

Objective

To study the impact of venous leg ulcers on health related quality of life and assessment of quality of life by using SF-36 Questionnaire, Charing-Cross Venous Leg Ulcers Questionnaire.

Design & Methods

A prospective study of 50 patients with venous leg ulcers was carried out from June 2017 to July 2019 using SF-36 Questionnaire, and Charing-Cross Venous Leg Ulcers Questionnaire.

Results

Ulcers healed in 86% patients, swelling of veins disappeared in 40% patients, pain relieved in 30% patients, feeling of heaviness resolved in 81% patients, itching relieved in 56% patients, swelling of limbs reduced in 54% patients, 56% ulcers did not bleed, exercise intolerance improved in 48% patients, night cramps relieved in 25% patients, edema disappeared in 48% patients, lipodermatosclerosis improved in 6% patients. Recurrence of ulcer occurred in 24% patients.

There was improvement in various parameters on SF36 questionnaire in form of Physical Function Domain, Role- Physical Domain, Validity Domain, Social Function Domain, Bodily Pain Domain, Role-Emotional Domain, SF-36 Questionnaire as a whole, this indicates that there were improvement in these Domains and SF-36 Questionnaire as a whole of 50 patients with statistically significant results ($p<0.05$). Mental Health Domain was not significant ($p=0.152$) with increase in Mean + SD after treatment.

There was decrease in Mean + SD after treatment in all domains of Charing Cross Questionnaire, this indicates that there was improvement in all domains of Charing Cross Questionnaire in 50 patients with statistically significant results ($p<0.001$). In Charing Cross Questionnaire lesser score indicates better results.

Conclusion

In our study we used SF-36 and Charing-Cross Venous Leg Ulcer Questionnaire to assess the Quality of life of patients of venous leg ulcer and found significant improvement in Quality of life in venous leg ulcer patients after the healing of ulcers with various treatment modalities.

ASSESSMENT OF RISK FACTORS IN ESTABLISHED CASES OF VENOUS THROMBOSIS

Authors: R K Chithra

Southern Railway Head Quarters Hospital

Objective

Even though it is a well known fact that there is prevalence of venous thrombosis in Indian population, there are few prospective studies in this regard. The aim of this study is to analyse the profile of Indian patient with non-Indians.

Design

1. **PLACE:** Vascular Surgery clinic, Southern Railway Head Quarters Hospital, Chennai
2. **DESIGN:** Prospective observational study
3. **PERIOD:** 6 years - From 01.08.2013 to 30.07.2019

Method

Patients visiting vascular surgery clinic at Railway Hospital, Chennai, with proven venous thrombosis were included in this study. Patient demographic details were collected. All patients treated with standard treatment. Hypercoaguable workup (Serum Homocysteine, Activity of Protein C, Protein S and Anti-thrombin III, APLA IgM and IgG, Factor V (Leiden) mutation) were done.

Results

294 patients were included in this study, with average age of 55 years. Male predominance (64%) of the age group of 51-60 was noted. Left side (65%) and femero-popliteal segment (42%) were commonly affected. Unprovoked (59%) dominated. Provoking factors identified in 41%, of which malignancy (24%) and post surgical, (23%) mostly neuro and ortho were the top scorers.

96 patients were investigated for hypercoagability status of which hyperhomocysteinemia (56 patients) was the commonest abnormality. 34 patients had more than one hypercoaguable factor positive and 14 patients were negative for any factor. 39 patients were tested for Leiden mutation of which only 6 patients were positive.

Conclusions

1. No difference in demographics in both Indian and non-Indian patients.
2. Immobilisation due to either medical or surgical causes is the common cause in Indian group, while it is previous surgery in the non-Indian group.
3. Malignancy is one factor which plays dominant role in both groups.
4. Hyperhomocysteinemia found to be the commonest cause followed by Protein S deficiency, with rare occurrence of Leiden positivity, while in most studies abroad, Factor Leiden is the most common anomaly.
5. It is a point to ponder that folic acid substitution in preoperative patients can prevent venous thrombosis.

NOTHING A STENT CANNOT SOLVE: A RARE VARIANT OF MAY THURNER SYNDROME

Authors: Joseph P, Kota P, Kota A, Agarwal S

CMC, Vellore

Background

May Thurner syndrome, also called as Cockett syndrome is an anatomical variant with extrinsic compression of the left iliac vein. The presentation is usually a young female patient with unilateral, left-sided lower extremity pain and edema.

Aim

We describe a rare form of May Thurner syndrome, caused by a pelvic arterio-venous malformation, not reported in literature, so far.

Methods

A fifty year old lady presented with significant left lower limb swelling for six months with inability to walk.

She underwent laparotomy, cholecystectomy and left ovarian cyst excision 2 years ago. The differentials considered were malignant lymphovascular occlusion, trauma during prior surgery causing isolated venous injury or an A-V fistula.

CT abdomen/ pelvis revealed a probable AV fistula between the left internal iliac artery and vein.

Result

She underwent a diagnostic arteriogram and venogram of the left iliac system which showed a diffuse nidus with rapid venous shunting and complete occlusion of the left common iliac vein. This was treated with iliac vein recanalization, venoplasty and stenting of the left common iliac vein.

She was relieved of her symptoms and at 6 month follow up, she was pain free and the limb girth normalised.

Conclusion

Benign iliac occlusion can lead to significant and painful lower limb edema but it is nothing a stent can't solve.

CORRELATION OF VARIOUS BIOLOGICAL MOLECULAR MARKERS IN DEEP VEIN THROMBOSIS: ITS ROLE, IMPLICATIONS & OUTCOMES

Authors: Ali A, Vaidya M, Shukla J, Tiwary S, Khanna A K

Banaras Hindu University

Objective

A variety of molecular markers are available to predict the chance of DVT in suspected population. D-Dimer, C reactive Protein, Homocysteine, s P selection and Factor VIII have been studied in various population.

Aim of this study is to make a correlation between various biomolecular markers in Deep vein thrombosis

Design & Method

Prospective study of 43 patients with proven Deep Vein thrombosis by Duplex sonography was carried in Department of General surgery, in collaboration with Department of Pathology IMS, BHU , Varanasi over a period of 2 years.

Results

Detection sensitivity of combinations of various biomolecular markers in Deep vein thrombosis

Combination Markers	No of positive cases	Sensitivity
D dimer	38	88.37 %
D dimer+ s P selectin	41	95.35 %
D dimer+ Factor VIII	41	95.35 %
D dimer + WBC	40	93.02 %
D dimer + s P selectin +WBC	43	100 %
D dimer + s P selectin + Factor VIII	43	100 %

Conclusion

On considering D dimer test to be gold standard CRP and Factor VIII tests had maximum sensitivity (78.9%). Homocysteine test had minimum sensitivity (23.7 %) but had maximum specificity. Positive predictive value was maximum with determining WBC count. Overall efficacy was highest with CRP and Factor VIII test (74.4 %). On considering Duplex scan to be gold standard, D dimer test had maximum sensitivity of 88.4 % where as Homocysteine had lowest sensitivity of 23.3 %. D Dimer also had the highest overall efficacy of 88.4 %. P selection did not score over other markers.

ENDOVENOUS LASER ABLATION VERSUS OPEN SURGERY IN ADDRESSING SYMPTOMATIC SAPHENO-FEMORAL REFLUX: A TEN YEAR RETROSPECTIVE ANALYSIS

Authors: Kota PB, John JM, Samuel V, Selvaraj D, Agarwal S

CMC, Vellore

Objective

To analyse the outcomes of endovenous laser ablation in comparison to open ligation and stripping for the management of symptomatic great saphenous vein (GSV) incompetence.

Methods

We have carried out a ten year retrospective review and follow up of demographics, outcomes and complications in patients who underwent intervention for GSV incompetence in CMC Vellore from January 2009 to December 2019 .

Results

Since 2009, 436 patients underwent open ligation and stripping and 797 patients underwent endovenous laser ablation. The average age of patients undergoing open surgery was 38 years, 86% were male. 46% underwent surgery on the left, 18% on the right and the rest were bilateral. Symptomatic recurrence was seen in 23% of patients, of which 14% underwent a re-intervention. Post-operative complications like hematoma, surgical site infection, femoral vein injury and deep venous thrombosis were seen in 6% of the patients. Among the patients who underwent laser ablation, the average age was 42 years, 87% were male, 27% had left sided incompetence, 40% had right sided incompetence and the rest were bilateral. Symptomatic recurrence was seen in 18.8% of the patients out of which 16% underwent a re-intervention. Post-operative complications like hematoma, surgical site infections, endovenous heat induced thrombosis were seen in 4.3% of patients.

Conclusions

The symptomatic recurrence rates following open surgery for saphenofemoral reflux were significantly higher than laser ablation however there was no significant difference in the re-intervention rates. The post-operative complications following open surgery were also significantly higher as compared to laser ablation.

PREDICTING THE MATURATION OF AV FISTULA WITH SPIRAL LAMINAR FLOW FOR HEMODIALYSIS ACCESS

Authors: Vijay Richard

MMC, Chennai

Objective

To detect the AV fistulas which will not mature at the earliest and thereby recommending a early redo autogenous AV fistula. Thereby decreasing the waiting period for HD via autogenous access

Design

Prospective study of 50 CKD patients who will be screened with Doppler at 0,7 and 14 days following AV fistula

Method

Spiral laminar flow is to be looked for in Doppler at 0,7 and 14 days. Successful outcome is HD via the created AVF.

Results and Conclusions

The study is under progress and the results will be submitted soon.

A STUDY TO COMPARE THE DIFFERENCE IN QUALITY OF LIFE BETWEEN THERMAL AND NON THERMAL METHODS OF ENDOVENOUS ABLATION IN PATIENTS WITH CHRONIC VENOUS INSUFFICIENCY

Authors: Sofia Mohan, Kota A

Introduction

Thermal ablation techniques have become the first-line treatment in the management of chronic venous disease. Despite excellent outcomes, these methods are often associated with pain; generally due to their use of heat and the necessity of fluid infiltration around the vein. More recently, novel non-thermal techniques, such as mechanochemical ablation (MOCA) have been developed to overcome these unwelcome effects.

Methods

A cross sectional study was done to compare the difference in quality of life between thermal and non thermal methods of endovenous ablation. All patients undergoing endovenous ablation were assessed both pre operatively and post operatively with a Veines qol/sym questionnaire. The data was analysed with SPSS software.

Results

There is significant improvement in quality of life in both the qol and the sym section of the Veines questionnaire with non thermal methods of endovenous ablation (P value <0.05)

Conclusion

Since non thermal methods have significant improvement in quality of life for patients, it is worthwhile pursuing this form of treatment for selective patients, despite some reports suggesting lower anatomical closure rates.

PULMONARY SADDLE WITH AORTIC SADDLE EMBOLISM

Authors: Naveen R, Radhakrishnan, Ayyapan, Kapil, Jithin

SRMC

Introduction

Venous thromboembolism (VTE) is a major health and financial burden that affects the community. VTE presents as deep venous thrombosis (DVT) and pulmonary embolism (PE). Pulmonary embolism if massive is potentially life threatening. Acute limb ischemia is the result of a sudden deterioration in the arterial supply. Large emboli, so called saddle emboli, occlude the normal aortic bifurcation leading to deterioration of blood supply to both lower limbs.

Methods

This patient presented with a massive saddle pulmonary embolism with Aortic saddle embolism. The acutely deteriorating general condition required an emergency bilateral pulmonary artery catheter directed thrombolysis followed by bilateral trans-femoral embolectomy. The potential benefit of thrombolysis had to be weighed against the risk of hemorrhage due to the surgery. The postoperative period was uneventful. This report illustrates the challenges faced while treating such a patient.

Conclusion

Pulmonary Saddle embolism is a potentially life-threatening condition, presenting along with aortic saddle embolism makes it more fatal. Treatment guidelines are not very well established for such a condition due to its rarity. Therefore, quick decision-making and prompt treatment plays a crucial role in such a patient in saving life.

CLINICAL PROFILE OF DEEP VEIN THROMBOSIS AND OUTCOMES IN PATIENTS PRESENTING TO A TERTIARY CARE CENTRE IN SOUTH INDIA

Authors: Samuel J Arthur, A Kota, S Agarwal

CMC, Vellore

Objective

Deep vein thrombosis is a common emergency, with significant risks of complications and mortality. The overall epidemiology of deep vein thrombosis varies worldwide. Multiple treatment options make management of deep vein thrombosis complex and the survival benefits of the treatment are variable. The purpose of our study is to retrospectively analyze the incidence, risk factors, pathology, treatment options and the survival estimation in patients in India as no definitive data is available nationally.

Design

A retrospective analysis of patients, from 2000-2019, who were diagnosed to have deep vein thrombosis and the assessment of the epidemiology, treatment and outcome in these patients.

Method

This is a retrospective study carried out in patients who were diagnosed to have deep vein thrombosis and confirmed by Doppler ultrasound between 2000 and 2019 at our hospital. In patient records and outpatient details were used for collecting data and for follow-up purposes. Epidata was used for data entry and qualitative analysis. A record was made of the age, sex, state of residence, weight, history of deep vein thrombosis, risk factors associated, distribution of the deep vein thrombosis, treatment, follow up assessment for post thrombotic syndrome using Villalta scale and survival estimates

Results

The incidence of deep vein thrombosis was found to be 15.3% per 10,000 admissions with increasing incidence with age. In our study, malignancy was found to be the most common cause in 35% of patient more than post operative status(29%). Acute deep vein thrombosis was found to be common than chronic (57% vs 43%) and involvement of the proximal veins was seen in 72.4%. Therapeutic low molecular weight heparin was the most commonest treatment modality used in 97.3% of patients. On followup 27.1% of patients had post thrombotic syndrome with ulceration the commonest presentation, while 47.9% had recurrent deep vein thrombosis. Pulmonary embolism was diagnosed in 11.75% of patients with mortality rate of 6.4%.

Conclusions

Deep vein thrombosis is a common problem in India and proper management plays a major role in preventing complications like post thrombotic states which can be a burden to our patients and mortality associated with pulmonary embolism.

VENOUS LEG ULCERS - FACTORS WHICH MAKE A DIFFERENCE

Authors: Gangadharan A N

MS Ramaiah Medical College

Objective

Venous disease contributes to approximately 70% of all chronic leg ulcers and these ulcers are often associated with pain, reduced mobility and a decreased quality of life. The published rate of healing of venous ulcers with compression therapy varies widely from 40-95%. This study aims at determining the possible risk factors for non-healing of venous leg ulcers with regular compression therapy.

Methods

A prospective observational study conducted at a single center was done. A total of 67 patients (39 men; mean age 56 years) with venous leg ulcers were included. Patients with an arterial disease (ABPI <0.8), cardiac ejection fraction (EF) <35, pregnancy, cancer, rheumatoid arthritis, and diabetes were excluded from the study. The following data were collected and analyzed: sex, age, ulcer characteristics, ulcer duration, previous procedures or surgeries, body mass index (BMI), distance walked during the day, ankle joint mobility, history of surgical wound debridement.

Results

After 24 weeks of standard treatment, 21 (31.3%) venous ulcers had failed to heal. The factors which were prognostically favorable for the healing of ulcers were a small ulcer area at presentation (<20 cm²), shorter duration of ulcer (<6 months), the formation of new skin on >10% of wound surface during the first 30 days of treatment. The factors which negatively influenced the ulcer healing were non-compliance to standard therapy, high BMI (>31 kg/m²), distance walked during the day (<200 m), history of wound debridement, deep ulcers, and reduced ankle range of motion.

Conclusion

The results of this analysis can help vascular surgeons treating venous ulcers identify prognostic indicators or risk factors that are significantly associated with delayed healing of venous leg ulcers. This will promote practical outcome planning and advise the implementation of effective early healing strategies. Overall, this research highlights the need to consider all risk factors to develop an effective treatment plan and recognize gaps in our services when assessing a venous leg ulcer patient.

FACTORS AFFECTING THE LONG-TERM PATENCY OF ARTERIOVENOUS ACCESS FOR HEMODIALYSIS: A SINGLE CENTER EXPERIENCE

Authors: A N Gangadharan

M S Ramaiah Medical College

Objective

To analyze and evaluate the possible factors in the long-term patency of arteriovenous access for hemodialysis.

Methods

A cross-sectional study recruiting patients from October 2018 to September 2019. All patients who have a working hemodialysis vascular access, either Arteriovenous fistula or Arteriovenous graft which has been working for at least 2 years were included and collected demographic data along with other parameters like the timing of creation, interventions, dialysis sessions, antiplatelet therapy among others.

Results

We included 81 patients with AV access patent for more than 2 years; 22.5% were aged >65 years, 39.6% were diabetic, 68.5% were hypertensive, and 26.1% had peripheral vascular disease. The analysis revealed that the significant factors affecting the patency of AV access were the use of jugular catheters for a long duration, maturation time, age, antiplatelet therapy, current tobacco usage, dialysis sessions per week, single-center dialysis.

Conclusion

Our study suggests that any AV access should have adequate maturation time before dialysis, as well as its adequate monitoring, are essential for maintaining patency. All the variables of the study have been observed and the final analysis is ongoing which will be presented at the conference.

LOW COST MODEL FOR SIMULATION AND AS A TEACHING TOOL FOR UNDERSTANDING ULTRASOUND GUIDED VENOUS CANNULATION

Authors: Mohan S, Arthur S, Samuel V

CMC, Vellore

Objectives

We sought to determine the utility of a low-cost model and brief educational session to help surgical residents understand ultrasound guided venous cannulation and increase exposure to vascular surgery with an easily reproducible model.

Design

Pilot study including survey with hands on instructional lesson.

Methods

Our department offers a workshop on venous diseases and related components of the surgical methods of endovenous ablation. Participants participated in a 45 -minute station where they were given a hands on training on ultrasound guided cannulation with the low cost model.

They then completed a survey after the station.

Results

85% of people felt that the station helped them understand venous cannulation and preferred it over traditional methods of teaching. 90% of people also felt that the model will help increase their confidence and surgical skill.

Conclusion

Simulation is a useful adjunct for teaching venous cannulation to surgical residents. Use of the model strongly increased participant interest in learning the technique of venous cannulation.

EFFECT OF ARTERY, VEIN DIAMETER IN EARLY PATENCY AND MATURATION OF FOREARM AVF - OUR INSTITUTIONAL EXPERIENCE

Authors: Srinivasan A, Sritharan N, Ilayakumar, Prathap Kumar

Madras Medical College

Objectives

Arterial Venus access in CKD patients are the lifeline measures there are several predictive factors influencing the early patency and maturation of fistulas. According to KDOQI guidelines the minimum diameter for artery and vein in AV access is 2MM & 2.5 MM. The aim of this study is to analysis the minimum diameter(even minimal than guidelines) of artery and vein whether have impact on early patency rate.

Study Type & Period

Prospective sample size 50

- Protocol : Fore arm AVF - artery \geq 1.6mm , vein \geq 2 mm
- Inclusion Criteria: All adult CKD patients enrolled for primary forearm AV access creation
- Exclusion Criteria : paediatric age , post transplant failure patients, penultimate accesses
- Primary outcome : Early patency rate

Results

In this study we found that artery diameter of about 1.8 MM and vein diameter about 2.3 MM is enough for early patency.

CASE SERIES OF DISTAL FOREARM BASILIC FISTULAS - AN UNCONVENTIONAL ACCESS

Authors: Srinivasan A

Madras Medical College

Objective

Native arteriovenous fistula done at the distal most site has been promoted as the vascular access of choice. Radiocephalic fistula at wrist orsnuffbox is widely used but ulnar/radial basilic fistula is seldom performed. The aim of this study is to analyse the usefulness of ulnar/radial basilic fistula as a hemodialysis access

Method

Retrospective and prospective analysis of forearm basilic fistulas.

- Period: august 2018 - august 2019
- Primary outcome : early patency and maturation rate

Results

In total AV ACCESS established in nine patients.

Functioning fistula Thrombosis Lost follow up

Radiobasilic4	2	1
Ulnarbasilic-	1	1

6 months patency rate is 55.55%. Among them 2 of the patients are having matured fistula even after 1 year. There was no distal ischaemia in any of them.

Conclusion

Ulnar/radial basilic fistula is anuseful alternative when radiocephalic fistula is not possible or has already failed. It has high long term patency, has minimal complications and has the advantage of retaining the proximal sites for fistula in case offailure.

ENDOVENOUS ABLATION OF FEEDING VEIN IS A GOOD THERAPY FOR LONG LASTING VENOUS LEG ULCERS, RESISTANT TO CONSERVATIVE THERAPY

Authors: Vrtovec M

University Medical Centre, Ljubljana, Slovenia

Introduction

Chronic venous leg ulcer is a demanding pathology. Optimal management and care of it, takes a lot of effort and involvement from the part of healthcare professionals and healthcare system in every community, and is time and money consuming. At last, it affects greatly patient's quality of life.

Methods

In our institution, we started to treat superficial venous insufficiency with endovenous approach several years ago. But patients with stadium C5 or C6 according to CEAP classification were treated primarily with combination of compression and medical therapy. In early 2019, we decided to introduce more aggressive approach to treatment also in this group of patients. First, we treated small cohort of patients with long standing active venous ulcers, resistive to conventional compression and medical therapy. We treated six patients of both sex, and of different age. Our inclusion criteria was as follows: over 18 years of age, normal mobility, no severe or uncontrollable concomitant systemic disease, and presence of a long-standing (from 2 to 22 years) venous leg ulcers, resistant to optimally conducted conventional therapy and uninfected at the time of endovenous ablation procedure. Procedure protocol included premedication with analgetic and anxiolytic pills, local tumescent anesthesia, and ablation of the great saphenous vein trunk. Special consideration was put into carefull selection of entry site; preferably distally to most distal insufficient perforating vein. Endovenous modality used was Nd-Yag 1064 Nm laser with bare tip fibre, in all patients. After the procedure, all patients were treated with short-stretching compression bandages for seven days. All patients were controlled clinically and with ultrasound at six months after the procedure.

Results

Two of the treated long-standing venous ulcers healed completely, and the rest of them was considerably smaller: ulcer surface area was at least 80% smaller in all patients at the six months after ablation. Except minor and transient pain in first days after ablation procedure, patients did not have any other complications.

Conclusion

Endovenous ablation can provide effective treatment option for long lasting, failed-to-heal venous ulcers. Ablation can be safely used in the period when ulcer is not infected. Distal enough puncture site (when suitable anatomic situation) is important to achieve favorable outcome.

HAEMODIALYSIS ACCESS FAILURE- ROLE OF PLATELET INDICES AND ENDOVASCULAR INTERVENTIONS FOR VASCULAR ACCESS SALVAGE

Authors: Vivek Vardhan

Ramaiah Medical College

Introduction

Autogenous arteriovenous fistulas (AVF) and prosthetic arteriovenous grafts (AVG) are necessary for chronic end-stage renal failure patients on haemodialysis. AVFs are the preferred initial haemodialysis access due to their longer patency than AVGs. Haemodialysis accesses are prone to failure due to stenosis over the anastomosis or outflow vein or central veins. Post stenosis, platelets play a crucial role in subsequent thrombus formation, leading to access failure. Mean platelet volume (MPV) is a biological marker of cardiovascular events. We studied MPV/ platelet indices in these patients as a predictive marker of Vascular Access (VA) dysfunction. However, little is known about the potential influence of MPV/platelet indices on vascular access patency in hemodialysis patients.

The objective of our study was to investigate the effectiveness of endovascular balloon angioplasty to preserve the patency of failing haemodialysis access and role of platelet indices in vascular access failure

Materials and Methods

Prospective study conducted at Ramaiah medical college hospital, Bangalore, Karnataka, from December 2016 to December 2019, in patients who demonstrated features of dysfunctional hemodialysis access.

Results & Conclusions

54 haemodialysis patients with features of dysfunctional hemodialysis access required endovascular balloon angioplasty. There were no perioperative complications. Median time from initial access creation to first balloon angioplasty was 12 months (2–48 months) for AVFs and 10 months (3–12 months) for AVGs. Median time for restenosis or access failure was 8 months for AVFs and 6 months for AVGs. Kaplan-Meier analysis for access patency after endovascular intervention showed 70% patency at 6 months and 32% at 12 months. Incidence of VA dysfunction was higher in patients with increased MPV. Multivariate analysis confirmed an independent association between MPV and VA dysfunction—OR 1.52 (1.13–2.07), $p < 0.001$. Patients with the raised MPV have the highest risk of VA events.

ASSESSMENT OF PERIPHERAL NEUROPATHY AND ANALYSIS OF GAIT IN PATIENTS WITH CHRONIC VENOUS ULCERS

Authors: S J Arthur, Vimalin S, D Selvaraj

CMC, Vellore

Objective

Patients with chronic venous insufficiency are found to have significant signs and symptoms of peripheral neuropathy. The pathogenesis of the peripheral neuropathy has not been clearly elicited and its role in gait abnormalities are still controversial. Gait abnormalities have been noted in chronic venous ulcers which has been due to reduced ankle movements and pedal pressures. The purpose of our study is to analyze the prevalence of peripheral neuropathy and to establish its association with gait disturbances in these patients.

Study Design

Case – control study. 50 cases of Chronic venous insufficiency with C5 to C6 disease according to the CEAP classification and 100 controls with Chronic venous insufficiency of C2 to 4 according to the CEAP classification. This study will be conducted in Christian medical college, Vellore over a period of 1 year.

Materials and Methods

Inclusion criteria : Any patient active non infected venous ulcers (c6) or history of ulceration (c5). Exclusion criteria: history of neuropathy , conditions predisposing to neuropathy. Medical history and examination of the foot and ulcer will be done for all patients satisfying the inclusion criteria. Objective neuropathic assessment will be done with NDS - Neuropathy disability score and evaluation of symptoms of peripheral sensory neuropathy will be done with NSS – neuropathy symptom score. Gait assessment will be done with analysis of the calf muscle function by electromyography, measurement of the pedal pressures , range of movements and kinematic measurements. After adequate matching, statistical analysis to ascertain the association will be done by calculation of the odds ratio.

Cost Analysis

The cost of NSS and NDS evaluation is nil. Complete gait assessment costs Rs.10,000 at our institution. If we avail this research grant, we shall request our research board to loan us the remaining amount to successfully complete this trial.

EVLT WITH FOAM SCLEROTHERAPY FOR VARICOSE VEINS: A SINGLE UNIT STUDY

Authors: Wasim M D.

Manipal Hospital

Introduction

The true incidence of varicose veins in our country is not known as majority of patients with mild to moderate varicosities do not report to the physicians and only patients with complication like eczema, ulceration and bleeding are seen in clinics and hospitals. The search for a more effective means of prevention and for the perfect cure for this common condition continues. The aim of this study was to assess feasibility of Endovenous laser therapy with foam sclerotherapy for varicose veins with SFJ/SPJ incompetence

Materials and Methods

A total of two hundred and fifty (n=250) patients underwent Endovenous Laser Therapy with Foam Sclerotherapy by a single Unit of Department of Vascular surgery of our hospital from May 2012 to April 2016. All consecutive patients were included having either unilateral or bilateral lower limb varicose veins and with or without venous ulcer. All included patients had Duplex ultrasound for assessment of varicosities and had SFJ incompetence. The patients excluded from the study had competent SFJ/ SPJ and Varicose veins with DVT. Operating method was standardized and laser ablation was done under ultrasound guidance with bare tip and radial fibre. Operating time, Post operative analgesia and follow up for recurrence (at 3 months and 24 months) were recorded and analyzed.

Results

Out of Two hundred and fifty (n = 250), the most common age group was between 31-40 years. 68% were females. Left limb was more affected. The patients presented with varied symptoms, out of which painless dilated and tortuous veins was most common. Long Saphenous system was the most common venous system affected by varicosity. The median operating time for one system was 35 mins. Visual analog scale for pain (VAS) was median 1 at 24 hours. 25 patients had pain for 2 weeks, 30 patients had ecchymosis, 45 patients had neuralgia, 35 patients had pain, none of the patients had skin burns and one (1) patient developed DVT. Mean hospital stay was 1 day. Follow up at 3 months showed, no pain and no scar. Conclusion: At present, endovenous laser ablation with Foam Sclerotherapy of both the GSV and SSV shows considerable promise in the treatment of varicose veins. Avulsion is not required. The advantages of this procedure include ease, safety, cosmesis and durability.

AUTOLOGOUS FAT GRAFTING FOR VENOUS WOUND HEALING

Authors: G S Satish Kumar

Regenerative potential of autologous fat grafting is being used for wound healing in clinical setting. Adipose-derived stem cells (ADSCs) contained within the stromal vascular fraction (SVF) of liposuction are used to promote revascularisation. ADSC (stem cells) modify immune responses via the paracrine secretion of numerous bioactive molecules. ADSC are able to differentiate into various terminal cells that contribute to wound healing. Fibroblasts and keratinocytes which are key components for also noted. Harvesting mesenchymal stem cells (MSCs) from bone marrow is more complicated and yields lesser stem cells compared to ADSCs which can be harvested (up to 5000 cells may be isolated per gram of adipose tissue) with minimal donor site morbidity and used without ex vivo culturing and expansion.

ENDOVENOUS LASER ABLATION OF INCOMPETENT PERFORATOR VEINS

Authors: G S Satish Kumar

Perforator vein incompetence contribute to chronic venous insufficiency (CVI) and ulceration. Minimally invasive endovenous ablative therapies have revolutionized the management of superficial truncal vein insufficiency. Endovenous ablative closure of perforating veins is achievable by using a 1,470-nm laser and bare-tip fiber and can be safely performed alone or in combination with microphlebectomy or sclerotherapy at all stages of CVI severity.

The technique and results are described

COMPLEX BYPASSES AND FISTULAS FOR DIFFICULT HEMODIALYSIS ACCESS: A SINGLE-CENTRE EXPERIENCE

Authors: Vivek Singh

Command Hospital, Chandimandir

Background

Chronic kidney disease patients require AV access for hemodialysis. Complex bypasses and fistulas are required when all other options have exhausted. We at a single centre performed complex surgeries for AV access and studied their patency rates and procedure related complications.

Objectives

To describe complex vascular access and their outcomes in 24 patients at single centre.

Material and Methods

Patients underwent basilic vein transposition bypass ($n = 11$), basilic to cephalic vein grafting ($n = 1$), AV bridge grafting ($n = 6$), Brachial vein transposition ($n = 4$), basilic vein angioplasty and redo anastomosis($n=1$), GSV to CFA transposition ($n=1$). Postoperatively patients had bimonthly clinical examinations in which the thrill, bruit, skin, cannulation sites, and adequacy of dialysis were reviewed. The study also included graft inflow rate, vein diameter, peak systolic velocities and cardiac output were also performed.

Results

There was Gd I steal syndrome in 01 patient which was managed conservatively. Patient with basilic vein angioplasty and redo-anastomosis developed pseudoaneurysm which was repaired. During the median follow-up time of 18 months, 3 patients died of causes unrelated to fistula. 02 surgical revisions were done. Primary patency rates were 90%, 85%, 68.5% respectively, at 6 months, 12 months, and 18 months; secondary patency rates were 95%, 90%, 70%.

Conclusion

Complex vascular access procedures can provide patients with good hemodialysis access where the simpler procedures have exhausted. In above study an acceptable patency rates were achieved.

ROLE OF LYMPHOSCINTIGRAPHY IN PHLEBOLYMPHEDEMA.

Authors: S Mithra

CMC, Vellore

Introduction

The swollen leg is a common problem in a wound clinic. The treatment and management of lymphedema and its associated complications including ulceration is an essential part of any good wound care service. As a result of the present practices and lack of treatment options, a large number of young patients, in the prime of their life, are confined to lifelong compression therapy and physiotherapy. Lymphoscintigraphy is used as a diagnostic modality in these patients. This study would aim to look at the role of lymphoscintigraphy in patients with pedal edema presenting to vascular surgery clinic.

Methods

This 3 year retrospective study evaluated patients with leg edema and underwent isotope lymphoscintigraphy to confirm the diagnosis of phlebolymphedema. These patients were also subjected to duplex imaging of the superficial and deep venous system. Standard statistical methods were used in the analysis.

Results

During the study period, 106 patients underwent lymphoscintigraphy. Majority of the patients had patent lymphatic channels with stasis and dermal backflow. 54 of these patients had concomitant venous pathology as confirmed by duplex. Of these, the most common type of venous abnormality seen was perforator incompetence (76%). Junctional incompetence was seen in 50% and deep vein reflux [DVR] in 16%.

Conclusions:

Lymphoscintigraphy aids in the diagnosis of phlebolymphedema. Majority of them have co-existing venolymphatic obstruction and evaluation of deep venous system may be needed.

OUR EXPERIENCE WITH MECHANOCHEMICAL ENDOVENOUS ABLATION FOR THE TREATMENT OF GREAT SAPHENOUS VEIN INSUFFICIENCY

Authors: Mohan A, Reddy V, Reddy M

Manipal Hospital, Bangalore

Objective

The World Health Organization defines varicose veins of the lower limbs, as superficial dilated veins that present as enlargements that are baggy or cylindrical due to a damaged vein valves.

This study evaluated the feasibility , safety and 6 months post-operative results of mechano-chemical endo-venous ablation (MOCHA) of great saphenous vein (GSV) insufficiency.

Methods

A prospective observational study. Patients diagnosed with GSV insufficiency were offered participation in the study and with informed consent 25 Patients were treated for GSV insufficiency with MOCHA by BALTON FLEBOGRIF CATHETER by using FIBROVEIN 3% (Sodium tetradecyl sulphate). The outcomes measures were technical success, clinical success ,anatomic success ,post-operative complication, post-procedural pain and time to return to work. Patients were evaluated with clinical examination at 1 st week,6 weeks and 6 months. Venous duplex scan was done at 6 months.

Results

The technical success was 100% ,18 cases were done under local anesthesia(72%) and 7 (28%)under sedation. The mean post-procedural pain during the first 1 week according to visual analog scale was 9mm per day. The mean time to return to normal activities was day 1 and to work was day 3 respectively. No major complications were recorded. At 6 months follow-up success rate was 92 %. The venous clinical severity score decreased significantly. At 6 months 88% of the treated GSV remain occluded as per venous duplex scan.

Conclusion

MOCA is a safe and effective technique in the treatment of GSV insufficiency with good technical,clinical and anatomic success. It is related to low post-procedural pain , low complication rate and fast return to normal activities and work.

GALA preceded with foam sclerotherapy for superficial veins- a rewarding technique devoid of doppler

Author: N K Malpani

Jaipur

Glow assisted laser ablation of gsv is a new technique in which the gsv can be ablated without using the doppler in operation room. this tecniqe found successful in more than 90% cases and is minimally invasive, day care, pain free procedure.

“gala” proceeded with foam sclerotherapy for superficial varicose veins further enhances the beneficial results as compared to post evlt sclerotherapy in superficial and residual veins.

MASSIVE PULMONARY EMBOLISM AND MASSIVE Ilio-FEMORAL DVT TREATED SIMULTANEOUSLY

Authors: Bedi H S

Objective

We present the first documented case of a patient with massive Deep Venous Thrombosis (DVT) and massive Pulmonary Embolism (PE) treated simultaneously

Material and Methods

A 46 year old female presented with left leg swelling . She was an operated case of cancer breast on Tamoxifen. On examination she was found to have features of left sided DVT extending upto the iliac vein “ the IVC was free (Figure 1). She was started on LMWH and DOAC. She developed dyspnea and collapsed . She was successfully resuscitated. A CT angiogram revealed a massive MPA PE (Figure 2). She was referred to our centre in a relatively stable condition on moderate inotropes. She underwent a CDT via the popliteal vein and a CDT of the PE via a catheter from the right femoral vein. Her PA pressure was $\frac{1}{3}$ systemic. A multihole Cragg-McNammara catheter was used to deliver the tPA at both sites. Aspiration of clots was also done . The tPA was given over 24 hours .

Results

The PA pressure fell immediately . A check venogram revealed a complete resolution of the clot with no iliac vein stenosis.

Conclusion

We present a first documented case of simultaneous CDT of a massive PE and a massive ilio-femoral proximal DVT.

VARICOSE ULCERS

Author: Parth Mulgaonkar

Introduction

Venous ulcers (also called as varicose ulcers), are the ulcers which are seen in patients of lower limb varicose veins. They are typically located between the knee and the ankle in an area of the lower one-third of the leg.

The venous ulcers are formed due to venous hypertension. Due to increased pooling of blood in the lower limb veins, there is increased pressure on the skin of the lower limbs with decreased oxygen supply to the skin and subcutaneous tissue of the lower limb. This finally results in the ulceration of the skin around the area of maximum venous hypertension.

The treatment of venous ulcer is tricky with a lot of patients having prolonged ulcers on their lower limbs without satisfactory healing. The ulcers are painless, can increase in size or can bleed on minor trauma. The result is an increased burden on the medical fraternity (the budget as well the medical staff) to do regular dressings of these ulcers without any significant good outcome.

Objective

To create a standard of treatment for venous ulcers. This will reduce the morbidity associated with venous ulcers. It will also help surgeons to create a standardised treatment for venous ulcers with satisfactory outcomes.

Designs and Method

Patients with lower limb venous ulcers will be worked up on OPD basis to undergo EVLA of the affected limb. The patient will be clinically evaluated and the results will be corroborated with USG Doppler ultrasonography findings. The patient will undergo EVLA. In post-operative period the patient will be given Multi-layered Pressure-graded compression bandage. The bandage will be removed after five days. The patient will be followed-up at 1, 4 and 12 weeks. Interval dressings will be given to patient as and when needed.

Results and Conclusions

At 12 weeks follow up the patient's venous ulcer had undergone complete healing and the symptoms of varicose veins (dragging pain, ulcer formation, skin changes, limb oedema) had reduced and the results were compared with a pre-operative and post-operative picture.

In conclusion, we, the team members at Nair hospital General Surgery department have developed an innovative way of treating the venous ulcers with a combination of Endovenous Laser Ablation along with multi-layered graded bandaging for venous ulcers.

PLATELET TO LYMPHOCYTE RATIO, NEUTROPHIL TO LYMPHOCYTE RATIO, AND PLATELET INDICES : POSSIBLE PREDICTIVE INDICATORS OF DVT

Author: H K Chowdary , Chandrashekhar AR, Rajendra Prasad, Sanjay Desai, Vivek Vardhan

MS Ramaiah Medical College, Bangalore

Introduction

Pulmonary thromboembolism is a serious complication in patients with deep vein thrombosis (DVT). Previous studies have demonstrated that platelet activation occurs in patients with DVT. Purpose of this study was to evaluate the value of CBC relative parameters including mean platelet volume (MPV), platelet-to-lymphocyte ratio (PLR), mean platelet volume-to-lymphocyte ratio (MPVLR), and neutrophil-to-lymphocyte ratio (NLR) as possible predictive indicators of acute deep vein thrombosis (DVT)

Patients And Methods

Retrospective study consisting of 52 patients with newly diagnosed acute DVT were included in the study. All patients and control participants underwent Doppler ultrasonography examination. Blood samples were drawn from all participants to obtain the values of CBC relative parameters.

Results

MPVs ($P < 0.05$), PLRs ($P = 0.005$), MPVLRs ($P = 0.001$), and NLRs ($P < 0.005$) were significantly higher in acute DVT patients compared to controls. The MPV was inversely correlated with platelet count ($P < 0.0001$). On multivariate logistic regression analysis, NLRs and D-dimers were independent risk factors of acute DVT (OR: 1.8, $P = 0.034$; OR: 1.009, $P < 0.05$, respectively).

Conclusion

MPV, PLR, MPVLR, and NLR were significantly elevated in patients with DVT as compared to controls and have potential diagnostic values for patients with unprovoked DVT. NLR is an independent risk factor related to DVT.

IMPACT OF A TRAINED VASCULAR ACCESS COORDINATOR ON VASCULAR ACCESS PROGRAM

Authors: Pundir E, Sharma A

PGIMER Chandigarh

Background

A functional AV fistula (AVF) is the lifeline of an end stage kidney disease patient. Most patients require multiple appointments/interventions and constant awareness regarding AVF functioning for maintaining long term patency of AVF. Vascular access coordinator can play a key role in achieving all these goals. The aim of the study is to assess the impact of a trained vascular access coordinator on vascular access program. MATERIAL AND METHODS Data was retrieved from the database and patient records for the year 2014 and 2018. The access coordinator was appointed in 2015, so 2014 as taken as a base year. The coordinator took about 2 years to become fully trained and data of 2018 was analyzed for comparison. The number of Arterio Venous Fistulas created, number of salvage procedures performed and follow up data were compared for these two years. Other parameters like number of operation theatre slots, surgeons, senior residents and other staff as well as equipments remained similar during this period.

Result

Total numbers of fistulas performed increased by 39.3% from 511 to 713 from 2014 to 2018. Majority of the follow-up visits could be managed by the access coordinator and the number of follow-up visits to surgeons were reduced from an average of 4 per patient to 1 per patient during this period. The number of follow up Doppler examinations increased by 70% from 761 to 1296 indicating improved fistula follow up and leading to early detection of fistula stenosis. The number of salvage procedures (thrombectomy and angioplasty) increased by 272% from 44 to 161 during this period. Compilation of operative and follow up data led to audit of primary and secondary patency rates amongst trainees providing opportunity to improve outcomes. Primary and secondary patency rates of 86% and 92% at 3 months could be achieved whereas no follow-up data was available for 2014. CONCLUSION The appointment of vascular access coordinator led to increase in number of AVF procedures being performed, dramatically improved the follow-up care of these patients and led to early detection and treatment of access dysfunction while reducing the workload of surgeons.

OUTCOMES OF FEMOROILIOCAVAL STENTING IN A TERTIARY CENTRE – A 10 YEAR RETROSPECTIVE ANALYSIS

Authors: J J Mathew

CMC, Vellore

Background

The endovenous approach to relieving venous outflow obstruction in advanced chronic venous insufficiency is widely accepted for its low morbidity. However the long term patency and clinical outcomes need further emphasis.

Objective

To assess patency and clinical outcomes of stenting of femoroiliocaval venous segment in an Indian tertiary centre

Design and methods

A retrospective analysis of all nonmalignant venous outflow obstruction who underwent stenting of the femoroiliocaval venous segment in the past 10 years in Christian Medical College, Vellore. A chart review of clinical symptoms at follow up and patency rates was done.

Results

From 2009 - 2019, 219 lesions of the femoroiliocaval vein were stented. Median age was 54 years, the male/female was 4.2:1, and left/right limb symptoms, 2.4:1. Average follow up was 24 months. The primary patency rate at 3 years was 70% in nonthrombotic disease and 50% in thrombotic disease. At 5 years, complete relief of pain, swelling and ulcer healing were 62%, 32% and 58%, respectively.

Conclusions

Deep venous stenting can be performed with low mortality, long-term high patency rate and major symptom relief in patients with chronic venous disease predominantly with non thrombotic etiology.

VENOUS THROMBOEMBOLISM PREVENTION AT PATIENTS WITH VARICOSE DISEASE UNDERGOING LAPAROSCOPIC SURGERY

Authors: J Matmuradov, Berkinow U

Tashkent Medical Academy, Uzbekistan

Background

Pulmonary embolism (PE) and venous thromboembolism (VTE) are the most frequent complications after operative interventions, especially if there are predisposing conditions of blood circulation.

Materials and Methods

There were 74 patients (34 male, 42 female) in Tashkent Medical Academy Hospital from April 2019 up to September 2019. Average age of patients was 35.4 years. Varicose disease of both lower limbs was diagnosed on 32 patients, on 42 patients – of one lower limb. Determining of treatment tactic was based on evidence of varicose disease, condition of ostial valves, valves of communicant veins, data of ultrasonic investigation on lower limbs' veins, ultrasonic investigation of abdominal cavity's organs', severity of concomitant pathology. These patients were undergone simultaneous operative intervention according to II class of severity by ASA classification. Surgical treatment of vascular pathology was reached by performing crossectomy and phlebectomy by Narat (41 patients) and by Babcock-Narat (33 patients), with further laparoscopic cholecystectomy. Postoperative care included anticoagulant, antiplatelet, phlebotonic therapy.

Results

Results of effective treatment were based on parameters of patients' coagulogramm after the operation and clinical manifestations. In postoperative period in 5 (6. 75%) cases was developed acute thrombosis of deep veins of shin, whereas PE have not been detected. Analysing the results of coagulogramms allowed to find out decreasing of INR up to 0.4-0.52 (average deflection 21,82%); PTT up to 20-23 (average deflection 17.4%); increasing of fibrinogen up to 431-517 mg% (average deflection 14.2%). Average indicator by Caprini scale was $2,1 \pm 0,3$ points.

Conclusion

Our tactics of surgical treatment of patients with varicose disease undergoing laparoscopic surgery, with adequate anticoagulant, antiplatelet and phleboprotective therapy is an effective method of VTE prophylaxis.

LEIOMYOMATOSIS OF INFERIOR VENA CAVA WITH INTRA CARDIAC EXTENSION Â“ TIPS & TRICKS FOR SURGERY

Authors: V kumar, Pitchai S, Pandey AK

Sree Chitra Tirunal Institute

Introduction

Leiomyoma of IVC is a rare tumor that is histologically benign but biologically malignant. It is most common in women in the 5th decade. Venous leiomyosarcomas are polypoid or nodular. The most common growth pattern is intraluminal, which makes the tumor removal possible even though the intracardiac extension is there.

Material and Methods

Case 1: A 42-year-old female presented with menorrhagia and on further evaluation was found to have a large uterine tumor, extending to the left common iliac vein (CIV), ovarian vein, to inferior vena cava (IVC) and the right atrium. The patient underwent an abdominal hysterectomy, during the end of the procedure, developed sudden hypotension and on transoesophageal echocardiogram detected tumor embolization towards the right main pulmonary artery. Emergency sternotomy, pulmonary arteriotomy, and tumor removal were done under cardiopulmonary bypass. Tumour could not be removed in a single piece, the IVC filter was deployed.

Case 2: A 45-year-old female having dyspnoea on exertion with the history of hysterectomy; on evaluation found to have pelvic leiomyoma involving right common iliac vein, IVC, Right atrium and Right ventricle. The patient underwent sternotomy, cardiopulmonary bypass (CPB) first; the tumor was removed from the Right atrium and ventricle. The CPB circuit was maintained at a low flow rate, then proceeded with abdominal surgery of removing the tumor from CIV and IVC in a single piece and CPB weaned off. No IVC filter was used in the second case

The patient's Histopathology report revealed leiomyomatosis of IVC with tumor emboli in both cases. Patients were planned lifelong anticoagulation and 3 months of anti-estrogen postoperatively and are doing fine after 2 years of follow up.

Conclusions

We suggest sternotomy; CPB and intracardiac tumor removal first is better than laparotomy first approach because Intra op tumor embolization can be effectively managed under CPB. We recommend Intra op transoesophageal echocardiogram in all cases for detecting tumor embolization. CPB should be maintained at a low flow rate throughout the procedure till tumor removal was complete; IVC filter can be used intraoperatively were tumor removal from abdominal IVC is not complete; Post-operative anticoagulation and anti-estrogen therapy are cornerstones for maintaining IVC patency and tumor recurrence.

COMPRESSION STOCKINGS: INVESTIGATING THE CHALLENGES BEHIND POOR COMPLIANCE IN THE OMANI POPULATION.

Authors: Rahma Al Harthi, Edwin S, Ibrahim A, Hanan A, Khalifa A

Oman Medical Speciality Board

Objectives

To identify the reasons why Omani men and women suffering from lymphedema, venolymphedema and venous disease, are not compliant compression stockings.

Methods

All patients between the months of June and November of 2019 who were advised to wear compression stockings were contacted (either during their follow up visit or by phone) and asked on their compliance to compression stockings and the challenges they face.

Results

There were 41 new patients with venous disease seen during the above period. 9 of the patients did not buy a pair of stockings, 15 had bought the stockings and were not using them, 8 patients used them occasionally in the initial weeks and 9 were fully compliant. The most commonly reported reasons for non compliance were discomfort, expense and forgetfulness.

Conclusion

No studies have been conducted in Oman to investigate the exact reasons for non-compliance to compression stockings in our population. This is important to identify, in order to address issues and custom make stockings to ensure proper compliance and hence good results.

CHALLENGING CONGENITAL VASCULAR MALFORMATIONS; OUR EXPERIENCE

Authors: Ghaita Al Mahrugi

Sultan Qaboos University Hospital

Congenital vascular anomalies (CVA) are those that are evident at birth and can be classified to either vascular malformations or vascular tumors. Vascular malformations represent an error in development of vascular embryologic tissue. Vascular tumors are benign endothelial neoplasms that grow by endothelial hyperplasia. Pediatric patients with CVA pose many challenges specially in the management of "difficult to treat" areas and the ones that are not responding to what considered standard of care therapy.

We present three challenging CVA cases being managed at our center among several others.

The first patient noticed at birth to have blue/red swelling of her right cheek as well as a patch on the right side of her tongue , after a thorough imaging studies she was diagnosed to have slow flow VMs, which was followed up conservatively .The lesions were stable in size for the last 3-months. The second patient was diagnosed at the age of 4 days with vascular tumor at the left thigh complicated with kasabach merritt phenomenon. He was managed as Kaposiforme hemangioendothelioma and treated with oral propranolol with good control of his symptoms. Finally, the last patient is a 7-year-old child diagnosed with right retro-orbital lymphatic malformation causing recurrent hemorrhagic attacks associated with acute painful proptosis.

We share the challenges faced in managing these cases.

OUR EXPERIENCE WITH SYSTEMATIC SURVEILLANCE OF ARTERIOVENOUS FISTULA PATENCY IN RENAL FAILURE PATIENTS - FIRST EXPERIENCE FROM OMAN

Authors: Al Hinai M, Al Maawali H, Stephen E, Aufi A, Abdelhedy I, Al Wahaibi K

Objective

Does systematic surveillance help improve arteriovenous fistula [AVF] patency in renal failure patients and health economics?

Methods

Prospective data was maintained in the electronic medical records, by our clinical nurse specialist, of all AVF created from December 2015 to September 2019 for patients requiring renal replacement therapy at the Sultan Qaboos University Hospital. From July 2018 to September 2019 a surveillance program of patients undergoing intervention to improve patency of AVF was started. The records were accessed to see if the surveillance helped improve patency, reduced number of emergency admissions and its effect on health economics.

Results

A total of 306 patients had AVF created during the study period. 44 patients required fistulogram with or without fistuloplasty. 6 of the 44 patients thrombosed their fistula. The number presenting to emergency department reduced by 50 percent. Overall in-hospital stay and repetitive investigations rates were also reduced.

Conclusion

A surveillance program requires liaising with the patient, their relatives, local health center, regional dialysis unit, interventional radiology, nephrology and vascular surgery team. We have seen a significant reduction in emergency interventions, increase in assisted patency rate of AVF, shorter in-patient hospital stay and decrease in numbers of lab investigations repeated.

DIFFICULT PERMACATH INSERTION FOR HEMODIALYSIS

Author: Dr Sandeep Agarwal

Gangaram Hospital, New Delhi

An 83 years old male patient, a known case of HTN and CKD since 2 -1/2 years on maintenance dialysis. He has history of multiple failed AV access including thrombosed permacaths placed in bilateral IJV, SFV and left CFV. He was found to have occluded bilateral iliac veins with occluded left CFV permacath, hence right SFV HD catheter was inserted for emergency dialysis. Now patient presented with irregular flows in right SFV HD catheter during dialysis. The patient was taken up for iliac venoplasty with long permacath insertion. Intra operatively the patient was found to have occluded juxtarenal IVC. Recanalization of iliac veins and IVC was achieved and ballooning of the recanalized the tract was performed using 5mm & 6mm balloons and long (55cm) permacath was placed in right. Good backflows noted in both parts and immediate dialysis was performed through permacath and the patient was discharged in stable condition.

WHEN YOU HEAR HOOVES – IT'S NOT ALWAYS HORSES!!

Authors: Al Kindi I, Stephen E, Al Maawali H, Abdelhedy I, Al Wahaibi K

Sultan Qaboos University, Oman

We present 2 cases of patients managed initially as Klippel–Trennuny Syndrome and varicose veins, elsewhere. The patient with KTS underwent EVLT and excision of the superficial veins behind the knee, while the other patient was being managed with compression stockings and sclerotherapy. At our clinic we did a thorough clinical examination and imaging to find that they both had Parkes Weber Syndrome and they underwent embolization of the feeding vessels with symptomatic relief. PWS is not as rare as it was thought to be and one needs to have a high index of suspicion to diagnose and manage the patient appropriately.

CENTRAL LINE MISADVENTURES - CAN THEY BE AVOIDED ?

Authors: Al Kalbani M

Sultan Qaboos University Hospital, Oman

Background

Central venous cannulation or catheterization [CVC] forms the core of managing critically ill patients. Inadvertent arterial or venous injury, despite the use of duplex ultrasound, can lead to significant and devastating complications, especially when large bore cannulas are used. This paper explains the way we managed five different scenarios, suggests a step by step guide to insertion of a CVC and prevent amisadventure.

Methods

We maintained records and followed up 5adult patients requiring hemodialysis who had misadventures with CVC insertion between March 2018 and November 2019.

Results

5 patients, 2 male and 3 female, between 25 and 82 years of age, underwent CVC insertion in an intensive care setting. The youngest had a carotid-jugular arterio-venous fistula that was detected after discharge and managed successfully by open surgery. The eldest, a male patient, had a perforation of the external iliac vein [EIV], which was managed successfully with endovascular balloon inflation. The third patient had femoral artery pseudoaneurysms, which were managed successfully with serial duplex ultrasound [DUS] compression. The fourth had an inadvertent puncture of the right common carotid artery during insertion of jugular CVC and was managed by manual and DUS compression as did the fifth lady.

Conclusion

DUS has reduced the incidence of complications from insertion of CVC. However, in order to further reduce or nullify the possibility of arterial punctures during CVC insertion, whether it be a small [< 7Fr] or large [>7Fr] cannula, the operator needs to follow certain basic steps, be aware of potential complications and know how to approach an inadvertent arterial / venous / nerve injury. Literature mostly deals with how complications were managed while we impress on the need for prevention. The authors recommend that clinical guidelines be formulated and followed in hospitals.

IS THE EGYPTIAN EYE DIFFERENT IN OMANIS - ANATOMICAL VARIATIONS OF THE SAPHENOUS FASCIA IN THE OMANI POPULATION

Authors: Al Adawi S, Al Aufi A, Stephen E, Abdelhedy I, Al Mawali H, Al Wahaibi K

Sultan Qaboos University Hospital, Oman

Aim

To detect the anatomical variations of the saphenous fascia in the Omani population, compared to published studies on the Western and Indian population.

Methods

The study following research committee approval will start from 1st November 2019. A venous duplex of the bilateral lower limbs of 100 consecutive volunteers at the Sultan Qaboos University Hospital will be performed by the first and second authors respectively, under supervision of a consultant. The great saphenous vein was traced at five-centimeter intervals from the groin and the point of exit from the fascia noted.

Results

This will be updated and discussed during the presentation.

Conclusion

The findings can help consent patients appropriately when they are to undergo any intervention for pathology involving the superficial venous system.

ECHOCARDIOGRAM SHOULD BE MADE MANDATORY FOR PREOPERATIVE ASSESSMENT OF VARICOSE VEINS?

Author: K.K.Pandey

Indraprastha Apollo Hospital, New Delhi

Secondary Varicosity is generally caused by previous DVT. A good Doppler is mandatory to rule out any residual DVT in varicose veins before any interventions. If deep veins are found not to be adequately patent, we don't do varicose veins surgery or interventions. In a few but a significant number of cases, varicose veins or CVI of lower limbs are present due to various cardiac problems also. If you do any surgery or interventions in this group of cardiac origin, without addressing the etiology, you are likely to cause more problems than it solves, and symptoms of varicose veins will never be controlled. This can land you in soup & legal problems as well. It is a good advice to get echo cardiogram during pre-operative work-up to avoid unnecessary recurring varicose veins complications. This presentation highlights this very important aspect.

HOW TO EXPAND VENOUS CONSTITUENCY IN YOUR LOCAL AREA?

Author: K.K.Pandey

Indraprastha Apollo Hospital, New Delhi

Our aim, as a Phlebologist is to see,in our practice more and more venous cases at the end of the day. But in India since independence, no dedicated and concerted effort was done to focus on venous cases,as a result venous field in our area of practice was gradually encroached significantly by other medical specialists. As our age advances, we move slowly getting inclined to do more venous cases rather than arterial cases in order to achieve work life balance and to get less mental stress. Therefore, from the very beginning of your practice,it is very essential to keep expanding our venous constituency in our local area of practice by raising awareness about veins in common public and at the same time de-encroach our venous area. This presentation highlights this aspect and gives tips how to go about it.

NURSES ABSTRACT 1

USE OF HUMAN-CHORION TISSUE ALLOGRAFT FOR NON-HEALING VENOUS ULCERS

Author: M. KAUR, R.JINDAL

Fortis Hospital, Mohali

Introduction

Venous Ulcer Healing is a major problem in cases of chronic venous disease. Healing of venous ulcers can take a very long time varying from 3-6 months. We want to study that if we add Human –Chorion tissue allograft to a granulating wound can the wound heal faster.

Method

We applied Human-Chorion tissue allograft in twenty patients with non-healingvenous ulcers especially which were not showing any response to full medical treatment and compression therapy and not showing progression in wound healing from at least six weeks.

Result

We found that the ulcers which were not healing from last six weeks months ,they started showing signs of healing and healed completely within a period of 4 to 8 weeks after multiple applications of Human – Chorion tissue allograft on an average four sittings were done. The response is positive in eighteen patients and two patients did not healed fully but did show signs of healing.

Conclusion

Any Patient with venous ulcer who are not responding or not showing any signs of Healing after full medical treatment and Compression for about three-four weeks. we can try Human –Chorion tissue allograft to help these ulcers heal up faster.

NURSES ABSTRACT 2

USE OF NEGATIVE PRESSURE WOUND THERAPY IN HIGHLY EXUDATIVE VENOUS ULCERS

Authors: M.KAUR, R.JINDAL

Fortis Hospital, Mohali

Introduction

Negative pressure wound therapy [NPWT] or vacuum assisted closure is a therapeutic technique using a suction dressing to remove excess exudate and promote healing in acute or chronic wound. It involves the controlled application of sub-atmospheric pressure to local wound environment using a sealed wound dressing connected to a vacuum pump. Highly exudative venous ulcers are difficult to manage as you cannot keep compression for 4-5 days and also risk of external infection.

Purpose

To evaluate the efficacy of NPWT in promoting wound healing in patients with highly exudative venous ulcers.

Method

NPWT help us in keeping the four layer bandage for five days to promote adequate compression in patient with highly exudative venous ulcers. Ten Patients were taken and NPWT was applied along with four layer compression bandage.

Results

Eight out of ten patients had successful tolerance of NPWT along with compression for five days. One patient had lot of pain for whom NPWT was removed after 2 days. In one patient NPWT stopped working at home where he had lot of exudation and maceration of skin. Eight patients had successful control of exudation with good management with only 2-3 applications of NPWT resulting in total disappearance of exudate and stoppage of antibiotics much earlier.

Conclusion

NPWT can convert highly exudative wounds to very low exudate and also helps in retention of the four layer compression dressing for five days. This treatment also helped in decreasing use of antibiotics and early healing of venous ulcer.

NURSES ABSTRACT 3

ROLE OF VASCULAR NURSE IN CARE OF POST-OPERATIVE PATIENTS WHO UNDERWENT ENDOVENOUS ABLATION.

Authors: Priyadarshini M , Ida Nirmal, DSelvaraj

CMC, Vellore.

Objective

To highlight the importance of the need to specially train the vascular nurses for better patient care outcomes.

Design

This is a descriptive, cross sectional and retrospective study in patients undergoing endo venous ablation using radio frequency ablation (RFA), Endo venous laser ablation (EVLA), Mechano chemical ablation (MOCA) and Sclerotherapy.

Method

82 samples were included in the study. Post-operative assessment was done including the clinical class and duplex screening and also they were advised on the usage of compression bandages/stockings.

Results

Out of 82 samples, 80 samples (97.5%) had good results and 2.4% required further intervention and about 4.8% of them had complications post-surgery.

Conclusion

This study proves that with adequate training, vascular Nurses will be able to perform thorough assessment and also provide quality health education which in turn yielded good results among patients.

Nurses Abstract 4

AWARENESS OF CHRONIC VENOUS INSUFFICIENCY AMONG GENERAL POPULATION.

Author: Priyadarshini M

CMC, Vellore

Objective

To assess the awareness of chronic venous insufficiency among general population.

Design

Descriptive quantitative design.

Method

Study was conducted among the relatives of patients admitted in general surgical ward of CMC Vellore. Within the descriptive research design consecutive sampling was used to recruit the subjects for the study. Data were collected through personal interview using a knowledge questionnaire developed by the investigator.

Results

Findings of the study revealed that majority of the subjects (80%) had inadequate knowledge on chronic venous insufficiency. 20% of the subjects had moderately adequate knowledge on chronic venous insufficiency.

Conclusion

This study clearly indicates the need for public awareness on chronic venous insufficiency so that it would help in prevention of this condition who are at risk and control of symptoms in individuals who are already suffering with this condition.

NURSES ABSTRACT 5

OUR INITIAL EXPERIENCE WITH CLACS

Authors: SUGANDHI, R.JINDAL

Fortis Hospital, Mohali

Introduction

Cryo- laser and cryo-sclerotherapy is a treatment for leg vein lesions by combining transdermal laser effect and injection sclerotherapy, with skin cooling [cryo-cold air blown into skin at twenty Degree Celsius. This treatment is used for the treatment of C1/C2 Varicose veins with very few reported series in the literature.

Purpose

To see if treatment of spider veins in lower limbs with this technique offer a good cosmetic result and also to look at complications.

Method

A study is conducted in a group of ten patient with C1 in varicose vein whom CLaCS was performed. We used 1074 ALMA NDYAG laser along with 75% dextrose as sclerotherapy under Augmented reality (vein viewer) and ultrasound. We followed up these patients upto 6 weeks.

Result

Seven out of ten patients were satisfied with one sitting and did not ask for second sitting. One patient had superficial skin necrosis of area around 2-3mm, which settled within ten days. One patient had mild staining in area of CLaCS at 6 weeks. More than fifty percent of the patients complained of pain during laser treatment (VAS 7-8).

Conclusion

CLaCS gives good results though there is a learning curve and one should be careful. We also feel that local Anaesthetic cream should be applied in all these patients as patients feel lot of pain. We could not compare plain Sclerotherapy with CLaCS in the study on treatment of C1 varicose veins.

NURSES ABSTRACT 6

STUDY OFFOUR LAYER BANDAGING COMPLICATIONS IN CASE OF VENOUS ULCERS

Authors: SUGANDHI, R.JINDAL

Fortis Hospital Mohali

Introduction

Four layer dressing is an essential treatment for the management of venous ulcer. We want to study what are the complications of four layer bandages done by the nursing staff in a single vascular center.

Method

We plan to include 100 patients with venous ulcer who will require compression therapy. We studied their Age, Sex, Indication of four layer bandages, wound infection, Application of Wound dressing, Dermatitis, experience of staff, Presence of pulses and other factors which could determine complications.

Result

Out of 100 patients, only 3 patients could not keep the four layer bandage for >2 days. All other patients could tolerate 4 layer compressions.

The main reason for non-compliance was pain and itching.

The complications encountered were skin maceration (8 patients), skin bruises and blisters (2 patients), dermatitis (5 patients), foot swelling (8 patients). The main reasons for complication were wound discharge, inexperienced person (less than ten cases experience), calf ankle circumference discrepancy and dermatitis.

Reasons

Most complications occur due to delayed follow-up, wet wounds, infection, too tight, too loose, itching, self four-layer compression bandage done by patients and swelling.

Conclusion

Four layer compressions should not be taken lightly and is associated with complications, if not done properly. All these factors should be considered in picture before we apply four layer compression bandages.

CRYO LASER AND CRYO SCLEROTHERAPY (CLACS) - SCOPE, EFFECTIVENESS AND PRACTICAL APPLICATION IN INDIAN SCENARIO : AN EARLY EXPERIENCE

Authors: Dr. Ashish D. Dhadas

Objective

Cryo Laser and Cryo Sclerotherapy (CLaCS) is a novel technique to treat spider veins and reticular veins (C1 disease). In South American and European countries, it is used predominantly as an aesthetic procedure. However, in India, these are not merely a cosmetic issue; many patients (predominantly females) have various symptoms (dull pain, heaviness, burning) associated with the C1 disease. Also, it is quite common to see patients having co-existent varicose veins and spider veins (C2 + C1 disease). The existing modalities of foam sclerotherapy or standalone transdermal laser have their limitations in treating the C1 disease effectively and aesthetically. This study aims to evaluate the scope of CLaCS procedure to treat C1 disease in Indian patients, its effectiveness and the way in which it can be implemented in the practice of an Indian Phlebologist.

Material and Methods

Patients with Spider Veins and Varicose Veins (C1 and C2 disease) who consulted at Surekha Varicose Veins Clinic, Samata Hospital, Dombivli between May 2019 and October 2019 were categorized according to 'Score 9 - 1'. Depending on their score, patients underwent Endovenous Laser Ablation (EVLA) followed by CLaCS sessions (Group A) or only CLaCS sessions (Group B).

Results

A total of 42 patients were treated in the above mentioned period. All patients were females (prevalence 100%). Of these, 30 underwent EVLA followed by 2 CLaCS sessions; the 1st session was initiated 4 weeks after EVLA. Interval between 2 CLaCS sessions was 4 weeks. A total of 12 patients underwent only CLaCS procedure - 2 sessions at an interval of 4 weeks. There were no serious complications such as skin burns, cutaneous necrosis, anaphylaxis. Temporary ecchymosis was observed in 12 patients which resolved in 2 to 3 weeks. Intra-venous coagulation was seen in 2 patients; however, it was limited to a small area and subsided eventually. The outcome was satisfactory (partial or total improvement of C1 disease) in 41 patients and unsatisfactory in 1 patient (no response).

Conclusion

CLaCS is an effective way to treat C1 disease in patients who seek cosmesis and also in those having various symptoms. It can be offered as a standalone procedure and also following EVLA. It offers excellent cosmetic results with minimal complications. It is a valuable addition to the armamentarium of Indian Phlebologists who are already doing Endovenous Treatment of Varicose Veins. Though the cost involved in the Phlebosuite set up is high, right approach and judicious use will help both in increasing the Phlebologist's work (thereby recovering the investment cost) and also benefit the patients in terms of aesthetic, satisfactory results.

HIGH VOLUME - LOW CONCENTRATION FOAM SCLEROTHERAPY FOR SYMPTOMATIC VARICOSE VEINS IN RESOURCE RESTRICTED SETTINGS – SAFETY, EFFICACY & HISTOLOGY ANALYSIS

Author: Dhanraj D Chavan

Affiliation – Medical Director, VeinMD – Varicose Vein Center, Pune, MH, India

Introduction

Foam sclerotherapy guidelines around the world do not agree upon the quantity & concentrations of foam. From the patient's perspective, relief of clinical symptoms is more a desired endpoint than vein occlusion rate.

Presented herewith is a method involving low concentration high volume foam which can be used in resource restricted environments, delivering symptomatic relief to patients even in absence of ultrasound guidance.

Methods

One-hundred-thirty patients (C3-C6) were included in the study. Foam Sclerotherapy (0.2% Polidocanol; mixed with room air 1:1 ratio) was used to treat all visible varicose veins in absence of USG guidance. Post-procedural compression (below knee 23-31 mmHg) for 3 weeks was used.

Results

Vein diameter in standing position of the treated veins was 12 + 10 mm (Figure1,2). Mean foam volume per session was 90 + 50 ml. At the 1 year ultrasound follow up complete vein occlusion was reported in 78% of cases. A complete resolution of the symptomatology was reported in 115(89%) patients at 1 month and in 104(80%) patients at one year.

VCSS was scored in 43 patients and it reported a significant reduction (from 12.72 to 2.72, p<0.0001) at 1 year. C6 patients were 19 (mean ulcer size: 460+140 mm²). Complete ulcer healing occurred in average in 26+10 days(Fig3,4,5).

At 1 month, ex-vivo histopathological analysis of a large vein segment (13 mm diameter in standing) showed complete lumen occlusion with well-formed sclero-thrombus (Fig6).

No major complications were reported.

Conclusion

Low concentration high volume foam sclerotherapy is safe and effective at 1 year follow up. In resource restricted countries the described technique could offer an alternative to ultrasound guided procedures even in the most advanced cases, like C6 or large calibre varicose veins.

Further investigations are needed for proper international homogenous recommendations on the maximum allowed volume of sclerotherapy. Quality of Life after catheter directed thrombolysis and

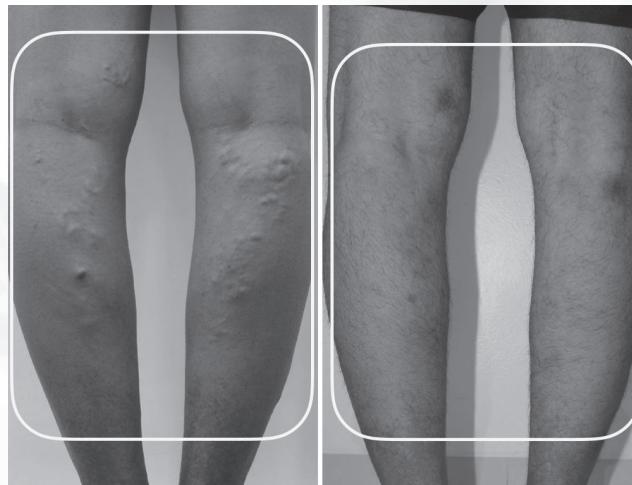


Fig 1 - Veins

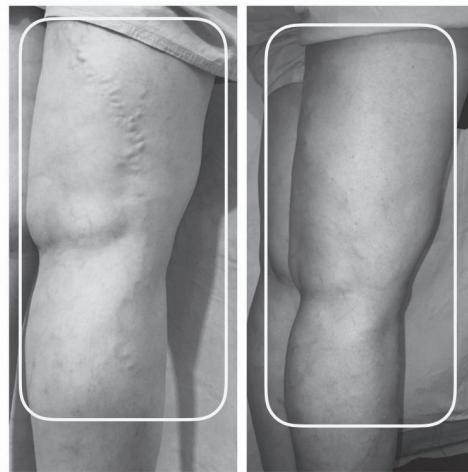
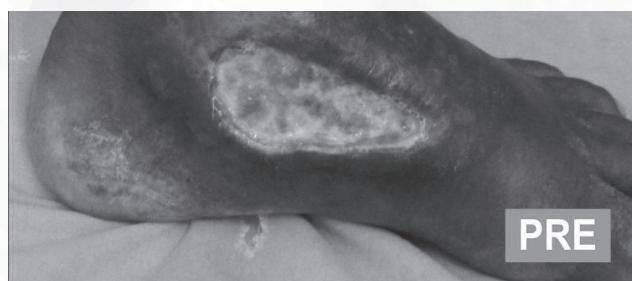


Fig 2 - Veins



PRE



POST 90
DAYS

Fig 3 - Ulcer



Fig 4 - Ulcer

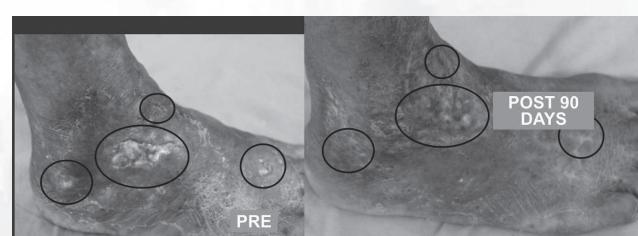


Fig 5 - Ulcer



Fig 6 – Histopathological section showing luminal occlusion by thrombosis & sclerosis of vessel of 1.3 cm diameter 1 month post ablation with 0.2% POL foam

STANDARD ANTICOAGULATION FOR ILOFEMORAL DEEP VEIN THROMBOSIS IN INDIA

Author: Dr. Jithin Jagan Sebastian

Introduction

India has younger patients presenting with ilio-femoral deep vein thrombosis (IFDVT). The aim was to determine the quality of life(QOL) after catheter directed thrombolysis(CDT) in these ideal group of patients compared to standard anticoagulation.

Materials and Methods

A prospective, non-randomised, case control study of patients who presented with acute, primary IFDVT. Post-thrombotic syndrome (PTS) was assessed by the Villalta score. Disease specific QOL was measured by VEINES -QOL/Symptoms and health related QOL by the EuroQOL(EQ)-5D questionnaires.

Results

A total of 189 patients presented with acute IFDVT. Villalta score and QOL scores at 2 years, for 49 CDT patients and 51 patients managed conservatively were compared. Demographics were comparable between the groups. PTS developed in 29% patients (18% vs 39%, p=0.035). The VEINES- Sym/ QOL (mean 74.29 vs 70.14, p=.006) and EQ-5D (mean 0.50 vs 1.76, p= .004) showed significant difference. Absolute risk reduction was 20.8% with a number needed to treat of one in five.

Conclusion

Catheter directed thrombolysis reduces the incidence of PTS and improves the health related and disease specific quality of life in these patients, compared to standard treatment.

A STUDY OF QUALITY OF LIFE IN PATIENTS WITH VENOUS LEG ULCER

Author: Manoj Kumar, S.K.Tiwary, T.B. Singh, Ajay K. Khanna

Department of General Surgery and Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University

Introduction

In spite of major advances in management of venous leg ulcer, complete healing and recurrence still stand as a challenge. Various studies have pointed out that patients with venous leg ulcer often experience functional disability and emotional distress, which negatively affects patients quality of life.

Objective

To study the impact of venous leg ulcers on health related quality of life and assessment of quality of life by using SF-36 Questionnaire, Charing-Cross Venous Leg Ulcers Questionnaire.

Design & Methods

A prospective study of 50 patients with venous leg ulcers was carried out from June 2017 to July 2019 using SF-36 Questionnaire, and Charing-Cross Venous Leg Ulcers Questionnaire.

Results

Ulcers healed in 86% patients, swelling of veins disappeared in 40% patients, pain relieved in 30% patients, feeling of heaviness resolved in 81% patients, itching relieved in 56% patients, swelling of limbs reduced in 54% patients, 56% ulcers did not bleed, exercise intolerance improved in 48% patients, night cramps relieved in 25% patients, edema disappeared in 48% patients, lipodermatosclerosis improved in 6% patients. Recurrence of ulcer occurred in 24% patients.

There was improvement in various parameters on SF36 questionnaire in form of Physical Function Domain, Role- Physical Domain, Validity Domain, Social Function Domain, Bodily Pain Domain, Role-Emotional Domain, SF-36 Questionnaire as a whole, this indicates that there were improvement in these Domains and SF-36 Questionnaire as a whole of 50 patients with statistically significant results ($p<0.05$). Mental Health Domain was not significant ($p=0.152$) with increase in Mean + SD after treatment.

There was decrease in Mean + SD after treatment in all domains of Charing Cross Questionnaire, this indicates that there was improvement in all domains of Charing Cross Questionnaire in 50 patients with statistically significant results ($p<0.001$). In Charing Cross Questionnaire lesser score indicates better results.

Conclusion

In our study we used SF-36 and Charing-Cross Venous Leg Ulcer Questionnaire to assess the Quality of life of patients of venous leg ulcer and found significant improvement in Quality of life in venous leg ulcer patients after the healing of ulcers with various treatment modalities.

COMPARATIVE ANALYSIS OF EARLY OUTCOMES OF RADIOFREQUENCY ABLATION AND 1470-NM ENDOVENOUS LASER ABLATION IN THE TREATMENT OF GREAT SAPHENOUS VEIN INSUFFICIENCY.

Author: Dr Saleem Jahangir

Yashoda Hospitals, Hyderabad

Background

Minimally invasive Endovenous Thermal Ablation Therapy has revolutionized the treatment of varicose veins. Comparison of radiofrequency ablation (RFA) and Endovenous Laser Ablation (EVLA) needs to be more elaborated in the context of better management of patients. The objective of this study is to compare 1470-nm endovenous laser Ablation (EVLA) and radiofrequency ablation (RFA) in the treatment of patients with great saphenous vein Insufficiency

Methods

There were 100 consecutive patients presenting to our department with a great saphenous vein insufficiency treated between June 2018 and June 2019 who were included in the study. The first randomly selected 50 patients (group1) received 1470-nm EVLA and the other 50 patients (group2) received RFA. Patients were assessed on the second day, the first week, and the first month in terms of post-operative complications, return to routine activity and work, and postoperative pain

Results

50 patients were allocated to each group. There was no statistically significant difference between two groups in terms of postoperative pain. Time to return to daily activity was 5.1 ± 1.12 hours in the EVLA group and 6.9 ± 0.93 hours in the RFA group ($P = 0.001$), whereas time to return to work was 6.7 ± 1.03 days in the EVLA group and 7.4 ± 1.07 days in the RFA group ($P=0.003$). Minor complications in EVLA and RFA group were ecchymosis 26% and 32% ($P=0.509$) edema 24% and 34% ($P=0.271$), and induration 14% and 22% ($P = 0.298$), respectively. No major complication were observed in any group.

Conclusion

EVLA using a 1470-nm radial fiber is an acceptable and efficacious treatment option over RFA in management of symptomatic varicose veins patients in terms of early outcome.

However, long term follow up and more studies on larger populations are required to establish the superiority of either method.

COMPARISON OF ENDOVENOUS LASER, RFA AND GLUE EMBOLIZATION TREATMENT FOR VARICOSE VEINS IN SINGLE CENTRE.

Author: Dr Shivaji Pole, Endovascular Specialist, Endovascular Care Aurangabad, Maharashtra.

Purpose

To compare endovenous laser ablation (EVLA), Radiofrequency venous ablation (RFA) and Glue Embolization Treatment in Single centre in different patient with venous insufficiency.

Methods

Total more than two thousands patients we have treated for varicose veins using different latest modality like EVLA, RFA and current Glue Embolization with or without sclerotherapy with saphenous and or perforator vein insufficiency were included.

Results

Excellent clinical result seen after 5 years more than 95% success rate with EVLA and RFA with Minor complications in EVLA and RFA were hyperemia at 20.7% and 31.0%, ecchymosis at 31.0% and 51.7% and edema at 27.6% and 65.5%, respectively which are not there with current Glue embolization. The rate of recanalization was 6.8% in the RFA group. No recanalization was observed in the

EVLA and Glue Embolization group. Times to return to daily activity were 0.9 days in the EVLA group and 1.3 days in the RFA and same day with glue Embolization group with the expert hands.

Conclusion

The Glue Embolization superior over EVLA and EVLA procedure may be superior to RFA in certain respects for the treatment of Varicose veins as a day care minimally invasive newer techniques.

Keywords

Varicose Veins, Endovascular Laser Ablation, Radiofrequency Ablation.

USE OF PLATELET RICH FIBRIN (PRF) IN VENOUS ULCER

Author: Dr. Taranvir Kaur

Introduction

Venous ulcers are very common in the world. Normal healing time of the venous ulcer varies from 3 – 6 months. They are difficult to heal and sometimes can be very resistant to compression also. There is not much literature published on the use of PRF in the management of venous ulcers. We want to do randomize controlled trials to see if PRF works in the treatment of venous ulcers or not.

Methods

We have already performed a small pilot study of 10 patients being treated with PRF which has shown promising results. Now we want to do a randomized controlled trial of 25 patients in each group and see the healing rate and the recurrence of ulcer along with standard treatment in both arms. Before we start the project we will also do the monkey survey of use of PRF in the management of venous ulcers in our vascular community.

Conclusion

At present PRF is not involved in the standard treatment of venous ulcers. If the results of this trial shows that healing is hastened as being showed by our pilot study then it can change the practice in the world.

Monkey survey

1. Do you treat venous ulcers regularly?
Answer Yes or No
2. Do you use PRF in your standard treatment of venous ulcers?
Answer Yes or No
3. How do you find the success rate with PRF?
Answer Yes or No or Don't know

PLATELET INDICES CORRELATION AND ITS ASSOCIATION WITH SUSCEPTIBILITY TO DEVELOP DEEP VEIN THROMBOSIS

Authors: Kumar Vaibhav, Anand Das, Ajay K. Khanna, Jyoti Shukla

Department of General Surgery and Pathology, Institute of Medical Sciences, Banaras Hindu University, Varanasi

Introduction

Platelets play a key role in hemostasis and thrombosis. Activated platelets release granule contents, which include platelet soluble agonists and adhesive proteins that greatly amplify platelet activation and help recruit circulating platelets to the site of vascular injury.

Larger mean platelet volume is an indicator of increased in vivo platelet activation. The mean platelet volume correlates with platelet activity whether measured as aggregation, thromboxane A2 or 3-thromboglobulin release, or adhesion molecule expression. Notably, larger platelets are haemostatically more reactive and prone to the development of thrombosis than platelets of normal size.

Aims & Objectives

To evaluate platelet function and morphology in deep vein thrombosis and identify high risk patients among general population.

Material & Methods

Total number of 33 cases and 33 controls included in study. Patients with acute DVT, confirmed by Duplex scan were included and those on antiplatelet/anticoagulant therapy were excluded. Beckmann Coulter analyzer used for CBC, MPV, RDW, PDW, PCT, P-LCC, P-LCR.

Observation & Results

On comparison of all platelet indices- TLC, RDW, MPV, PDW and P-LCR were raised in case group as compared to control group. Correlation study showed that MPV is directly related to PLCR and inversely related to platelet count. Platelet count is directly related to PCT and PLCC. ROC analysis of all platelet indices gave a cut-off value to identify DVT patients. All cases were divided in two groups, one group having less than that cut-off and other group having more than that cut-off value. All platelet indices were further compared with these two groups and significant results were obtained. Platelet count was significantly raised in patients with MPV<9.25fL. P-LCC was significantly raised in patients with platelet count >2.4 lac. TLC, MPV and P-LCR were raised in patients with platelet count <2.4 lac. Platelet count and P-LCC were raised in patients with plateletcrit >20%.

CONCLUSION

Platelet derived microparticles are 3-4 times raised in patients with DVT. Combination of various platelet indices with D-dimer can increase detection sensitivity of DVT even in the absence of duplex scan and can be used as OPD basis. Platelet aggregation test is not a reliable test to identify high risk patients of DVT.

MICRO VENOUS VALVE FAILURE: IS THIS THE KEY TO THE PATHOLOGY OF VENOUS ULCERS?

Authors: Vimalin Samuel, Dheepak Selvaraj, Sunil Agarwal

Department of Vascular Surgery, Christian Medical College, Vellore

Purpose

To determine the role of micro venous capillary valves of the superficial venous system in the patients with venous ulcers.

Introduction

Popular opinion is divided as to whether valvular incompetence progresses in an ascending or descending manner. Till recently, it was widely believed that valves do not exist in veins <2 mm in diameter. With this, began the assumption that the culprit for venous disease was the valves in larger veins. However, there have now been a number of studies providing robust evidence for the existence of valves in veins <2 mm diameter in human skin.

Further studies into the function of micro venous valve are warranted, as they may prove important to the development of severe venous disease.

Till date, there has been one study demonstrating the role of reflux in cadaver models using resin casts and electron microscopy

Study Design

Analytical observational prospective study

Inclusion criteria

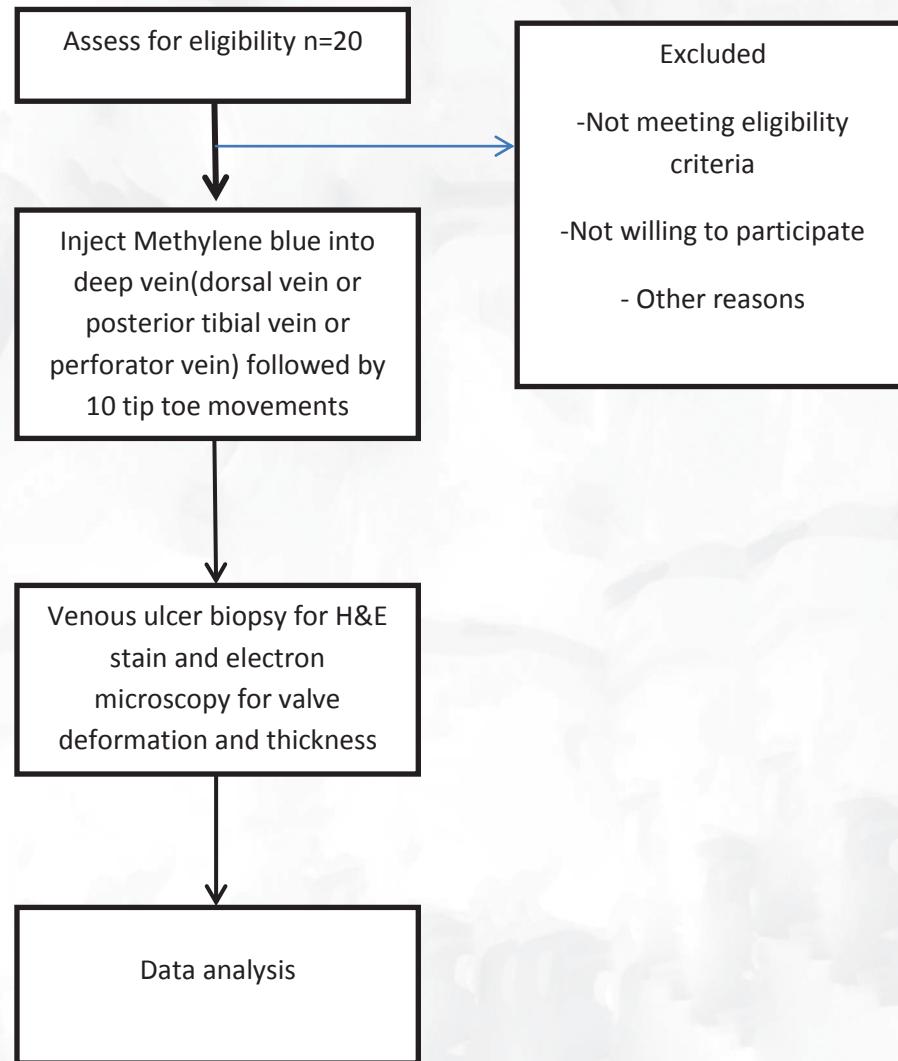
All patients presenting with venous ulcers to our institution.

Exclusion criteria

Patients with other causes of chronic ulcers

- Diabetes
- Vasculitis
- Infection
- Peripheral arterial disease
- Malignancy

Study protocol



Financial interest: None

Cost of each electron microscope study: Rs. 10000

Total costs of study: $20 \times 10000 =$ Rs. 2,00,000

Applying for other funds: Yes, Institutional research funds for Rs. 1,00,000

Conflict of Interest: No

Declaration: Not presented or studied earlier

TITLE: PREVALENCE OF MULTIMORBIDITY IN PATIENTS WITH CHRONIC VENOUS DISEASE

Authors: Viswanath Atreyapurapu, Pranav Hinduja, Amrusha Musunuru, Sahasreddy Jitta, Prem Chand Gupta, Gnaneswar Atturu

Introduction

Multi-morbidity has become the new pandemic, with a rise in the number of patients presenting with two or more medical conditions. Management of these patients is challenging with high utilisation of healthcare resources, polypharmacopia, drug interactions and adverse health outcomes. The aim of this study was to understand the prevalence of multimorbidity in patients presenting with chronic venous disease (CVD).

Methods

Electronic medical records of all patients who visited the vascular department with signs and symptoms of chronic venous disease between January 2015 to July 2019. were reviewed. Structured proforma was used to collect data regarding their existing medical conditions in addition to CVD. Descriptive statistics were used, and Data was analysed using Excel 2016.

Results

A total of 8018 patients were included in the study with a mean age of 50.61 (range 14–94). 4659 patients were men (58.11%). 5366 patients (66.92%) presented with bilateral CVD. 1595 patients (19.89%) and 1057 patients (13.18%) presented with isolated left and right leg CVD respectively. Majority of the patients were in CVD 4 (40.38%) followed by CVD 2 (28.77%) clinical stages. 2814 patients (35.09%) did not have any co existing health conditions. The remaining 5204 (64.91%) patients had one or more health conditions in addition to CVD. The most common medical condition was Hypertension (HTN) (32.43%, 2600) followed by Diabetes Mellitus (DM) (20.02%, 1605), Hypothyroidism (13.67%, 1096), osteoarthritis (4.98%, 399) and Ischemic heart disease (IHD) (4.03%, 323). 292 patients (3.64%) had past history of deep venous thrombosis. Conditions that were present in less than one percent of the patients include cerebral vascular disease (CVD), Chronic kidney disease (CKD), Chronic liver disease, peripheral vascular disease and Migraine.

Conclusion

The results of the study show that majority of CVD patients (65%), in India, have one or more co existing medical conditions. In spite of DM and HTN being the commonest co-existing medical conditions, the prevalence of CVD, CKD and PVD were less than one percent in these patients. Physicians and surgeons involved in the care of such patients need to be aware of their specific requirements.

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1. International Angiology. June 2018; 37(3):181-254. 2. IMS Health Analytics Link, MAT Q4 2014, 71 countries.

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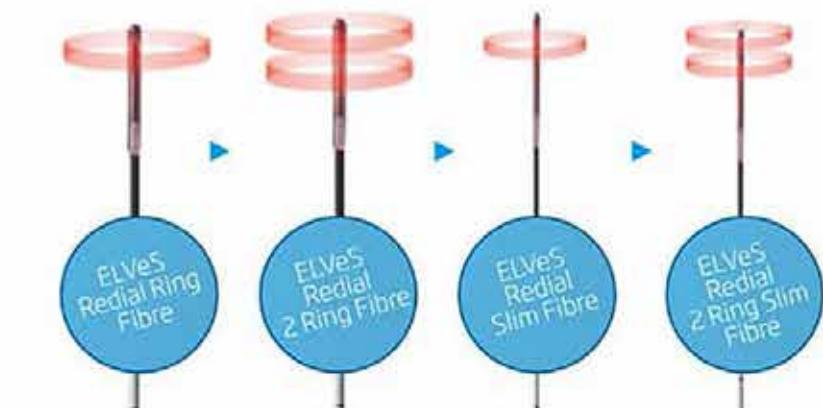
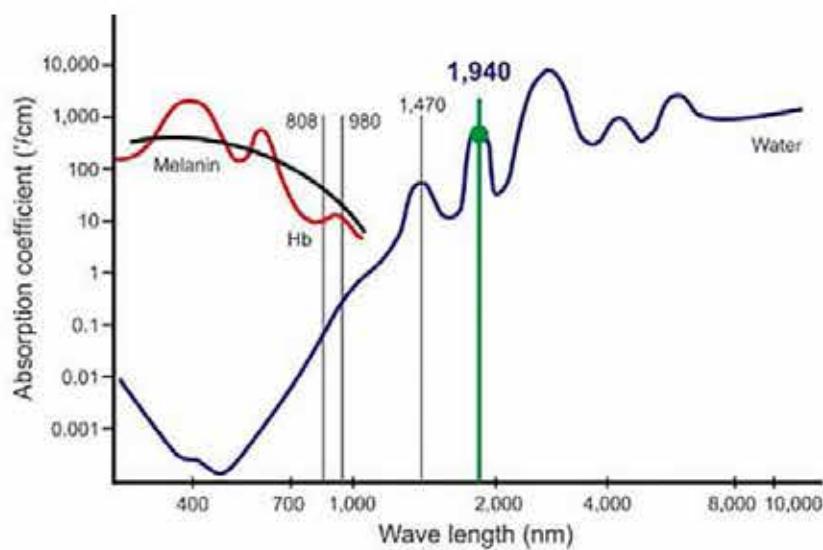
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