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TREATMENT OF ESOPHAGEAL OBSTRUCTION FROM MEDIASTINAL COMPRESSIVE TUMORS WITH COVERED, SELF-EXPANDING METALLIC Z-STENTS. B DeGregorio, K Kinsman, R Katon, R Saxon, RE Barton, F Keller, J Rösch. Oregon Health Sciences University, Portland, OR

Mediastinal malignancies may involve the esophagus leading to esophageal stenosis and dysphagia. Self-expanding metallic stents have been used successfully to treat malignant esophageal obstruction (from intra-esophageal tumors) and esophago-respiratory fistulae, but their efficacy in treating dysphagia secondary to extra-esophageal compressive tumors has not been studied. It has been suggested that treating compressive lesions with rigid endoprotheses is contraindicated because of high perforation and mortality rates. We report our experience treating malignant dysphagia from extra-esophageal tumors with covered, self-expanding metallic Z-stents.

METHODS: 13 patients with mediastinal compressive tumors were studied. There were 9 males and 4 females with a mean age of 67 years (range 52-90). Tumor types included lung 9 (adenocarcinoma 6, large cell 1, squamous 1, mesothelioma 1), breast 2, laryngeal 1 and colon 1. Mean dysphagia grade was 3.15. Stricture length ranged from 3-10 cm (mean 6.4 cm). All patients had monthly follow up to monitor symptomatic response. Early (within 24 hrs) and late (after 24 hrs) complications were reviewed.

RESULTS: Stents were successfully placed in all 13 patients. Dysphagia improved in all 13 patients. There was an improvement in mean dysphagia grade from 3.15 to 0.62. Mean survival was 2.2 months. (range 0.25 to 10 months). Early, procedure-related complications occurred in 3 of 13 patients, but were minor and transient (chest pain resolved within 4-6 hrs). Later complications occurred in 2 patients and included partial proximal migration of the stent (1) and benign,stent related stricture (1). There was no procedural or stent related mortality.

CONCLUSIONS: Covered, self-expanding metallic Z-stents are effective in treating malignant dysphagia secondary to extra-esophageal compressive tumors. Their placement can be achieved efficiently and safely.

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MINIMAL STANDARD TERMINOLOGY FOR A COMPUTERIZED ENDOSCOPIC DATABASE: RESULTS OF PRELIMINARY TESTING. M. Delvaux, M. Crespi, M. Schapiro, C. Venables, F. Zwiebel and the Committee of the ESGE for Minimal Standards in Digestive Endoscopy, Roma (I), Toulouse (F), Los Angeles (CA), Newcastle (UK) and Berlin (D).

The aim of this project was to devise a "minimal" list of terms that has to be included within any computer system used to record the results of a gastrointestinal endoscopic examination. This minimal terms list (MTL) was built selecting terms from the OMED extended terminology, according to following criteria: (1) Selected terms needed to have a wide acceptability; (2) Descriptors based on subjective impression of the examiner were not accepted; (3) Findings featuring in less than 1 % of endoscopic reports were disregarded. In addition to the MTL, the Committee addressed the issues of (1) "Reasons for performing an examination" which consists of a list of the most common clinical situations or diseases that may require an endoscopy be performed and (2) "Tentative Diagnosis List" which consists of a list of diagnosis the endoscopist may suggest at the end of an examination, in view of findings observed during it. This list is divided into 2 parts: a list of the most common diagnosis in a general endoscopic practice and a list of less frequent diagnosis, put on an alphabetical order.

Structure of MLT. A total number of 165 terms has been selected. The MLT is provided in separate lists for each type of examination (EGD, Colonoscopy, ERCP, Therapeutic procedures), the terms being organized for each organ, as previously proposed in the OMED Terminology. Headings are: Normal, Lumen, Content, Flat lesions, Protruding lesions, Excavated lesions, Other. Attributes may be linked to a term in order to specify some of its aspects. A list of anatomical locations is also proposed for each organ while distance in cm from ostia is only recommended to be used to specify the location of lesions in the esophagus or the rectum.

Testing of MLT. The MLT was retrospectively compared to existing databases (9,729 EGD, 3,321 colonoscopies, 387 ERCP) and prospectively evaluated over 500 EGD, 481 colonoscopies and 373 ERCP from different centers. The overal percentage of endoscopic findings, fully recorded using only the terms from the MLT, was between 85 and 98 % for EGD, 90 to 96 for colonoscopy and 80 to 100 % for ERCP.

Conclusion. Preliminary testing of the MLT has indicated that it fullfills the requirements defining a "minimal standard terminology". Prospective evaluation of its accuracy is now undergoing in multicenter trials both in Europe and in the United States, in cooperation with the Computer Committe of the ASGE (Chair: L.Y. Korman).

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REPORT GENERATION IN DIGESTIVE ENDOSCOPY USING A COMPUTERIZED ENDOSCOPIC DATABASE: RESULTS OF 4 YEAR-EXPERIENCE. M. Delvaux, H. Schübbe*, J. Stettin*, J. Frexinos, J. Escourrou. Digestive Endoscopy Unit, CHU Rangueil, Toulouse, France, *Olympus Software, Hamburg, Germany.

The production of a detailed report immediately after the endoscopy is one of the main requirements for quality insurance. The introduction of computers in the endoscopy room may help to favourize the input of the report by the physician himself. A software for report generation is expected to have a convenient user interface, to produce the report in a short time, avoiding typing of long free-texts and to allow quick retrieval of the data. The aim of this study was to examine the 4 year-experience of our endoscopy unit using a computerized database for report generation.

Method. Since April 1991, all endoscopic reports were entered by the physician on a Macintosh computer installed in the endoscopy room and linked to a server sharing the data file and the printer. The database was built with the prototype software from Olympus, Endobase 1.04. Terms describing the reasons for performing the endoscopy, the findings, the tentative endoscopic diagnosis and therapeutic procedures are proposed in a structured list divided in 5 levels: level 1 is the type of examination (EGD, colonoscopy, ERCP), 2 is the examined organ, 3 is the headings of the OMED terminology for findings (Normal, Lumen, Content, Flat, Protruding or Excavated lesions, Other). Additionnal levels are used when required in order to avoid long lists of terms appearing on the screen. We prospectively evaluated the training time of each endoscopist (defined by the detection of less than 10 % records using free-text while a term was offered), the mean time to enter a report and the use of free-text facilities.

Results. From 04/91 to 12/94, 16,123 examinations were recorded by 57 different physicians, either well trained or under training in endoscopy. The mean time for learning the use of the software was 3.7 ± 2.4 weeks. The global use of free-text blocks was 17.8 % of the examinations for the 12 first months but decreased progressively down to 3.4 % after 24 months and remained stable afterwoods. Mean time to enter a record was evaluated over the last 12 month-period and was 3.8 ± 2.9 min for an EGD, 4.1 ± 3.6 min for a colonoscopy and 5.2 ± 2.7 min for an ERCP.

Conclusion. The use of a computerized database in digestive endoscopy allows the physician to generate the report by himself, immediately after the procedure, ensuring a complete recording of findings and a quick transfer of information to referring physicians. Thereby, it contributes to improve quality insurance process in digestive endoscopy.

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IS ENDOSCOPY NECESSARY PRIOR TO ENDOSCOPIC ULTRASOUND (EUS) ? A. Duong, N. Chang, K. Chang. Division of Gastroenterology, University of California, Irvine Medical Center and the DVA Medical Center, Long Beach, California.

EUS and EUS-guided fine needle aspiration (EUS-FNA) are used to diagnose and stage tumors both within and adjacent to the gastrointestinal (GI) tract. As current echoendoscopes are oblique-viewing instruments, many endosonographers also perform endoscopy prior to EUS of the upper or lower GI tract. Whether endoscopy is necessary as a prelude to EUS is unknown. We report a prospective series of 176 EUS procedures which all had endoscopy as an adjunct. **Methods**: 175 patients underwent 176 EUS procedures of which 93 also included EUS-FNA. All patients had straight-viewing endoscopy immediately prior to the EUS examination. EUS was performed using the Olympus GF-UM3 or GF-UM20 echoendoscope. EUS-guided FNA was performed using the Pentax/Hitachi FG-32UA echoendoscope. Endoscopy was considered useful if it located lesions to be studied by EUS or if it found unsuspected but clinically significant pathology. This included extrinsic compression of the GI tract lumen which demarcated an area for subsequent EUS evaluation. All procedures were performed by a single endoscopist (KC).

Results: Endoscopy was useful in all cases involving mucosal and submucosal lesions (32 esophageal, 47 gastric, 6 duodenal, and 19 colorectal). Among cases in which the indication for EUS/EUS-FNA was a suspected or known extraluminal lesion (e.g. patients with clinical suspicion of pancreatic cancer, patients with obvious mass on CT), endoscopy was helpful in the following:

Lesion	EUS alone	EUS w/ FNA	TOTAL
Pancreatic	9/25 (36%)	12/32 (38%)	21/57 (37%)
Mediastinal	-	3/11 (27%)	3/11 (27%)
Pelvic	0/1 (0%)	2/3 (67%)	2/4 (50%)
TOTAL	9/26 (35%)	17/46 (37%)	26/72 (36%)

For suspected extraluminal lesions, endoscopy was helpful in about 1/3 of cases. The significant lesions found in these patients were: 14 extrinsic compressions, 6 mucosal tumors, 4 gastric ulcers, 1 duodenal ulcer, 1 esophageal ulcer. **Conclusions:** 1. Endoscopy is useful in localizing lesions prior to EUS in patients with mucosal/submucosal pathology. 2. Endoscopy also appears to be useful in patients who are being evaluated for possible extraluminal lesions.