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INFLUENCE OF FELLOWSHIP TRAINING ON THE PERFORMANCE OF ERCP. FC Ramirez. Carl T Hayden VA Medical Center, Phoenix Arizona.

Participation of fellows of different levels of training may effect the performance of endoscopic procedures, especially ERCP. Procedure time and drug requirement for conscious sedation and other factors may be altered during this teaching activity.

Objectives: To assess the impact of I, II and III Year fellows on ERCP completion time and quantity of drugs used for conscious sedation.

Material and Methods: 500 ERCPs at a VAMC were reviewed. All ERCPs were performed by or under the supervision of one Staff gastroenterologist (S) and different fellows in training. The following teams were defined: A: S+IIIYr; B: S+IIYr; C: S+IYr; D: S+II+IIIYr; E: S+I+IIIYr.

Results: A IIIYr Fellow was involved in 86%; a IIYr in 51% and a IYr in 18% of cases. 58% of the procedures were therapeutic. With different levels of participation, the fellows' involvement in the therapeutic procedure was similar to the above figures. Duration in min., and drug doses in mg. (mean±SEM) used by each team and the statistical differences between groups are shown below.

	Team A	Team B	Team C	Team D	Team E
Time	52.2 ± 2.2^{abg}	61.1 ± 3.7	48.3 ± 6.5^{de}	66.4 ± 2.6^{ad}	65.5 ± 4.4^{eg}
Demerol	80.9 ± 3.2^{b}	91.6 ± 7.4^{ch}	63.1 ± 7.0^{bcd}	88.9 ± 2.9^{df}	71.9 ± 4.3^{fh}
Valium	6.6 ± 0.3^{ab}	8.5 ± 0.8^{c}	4.7 ± 0.6^{bcde}	9.7 ± 0.4^{adf}	7.30 ± 0.7^{cf}

^{a,b,c,d,e,f,g,h} $p<0.05$

All teams decreased their procedure times as the year progressed, but only Team B reached statistical significance (71.9±4.3 vs. 53.2±5.03 min), (p=0.01).

Conclusions: 1) Procedure time was significantly shorter with the most experienced (Team A), and Team C (where attending takes over procedure). 2) Drug dosage was inversely proportional to level of fellowship training. 3) Procedure time decreased as each team gained experience.

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EFFICACY AND TOLERABILITY OF SODIUM PICOSULPHATE WITH MAGNESIUM CITRATE VERSUS POLYETHYLENE GLYCOL ELECTROLYTE LAVAGE SOLUTION FOR COLONOSCOPY PREPARATION A. Regev, G. Fraser, G. Delpre, A. Laiser, A. Neeman, E. Maoz, V. Anikin, Y. Niv, Department of Gastroenterology, Beilinson Medical Center, Petah Tiqva, and Sackler School of Medicine, Tel Aviv University, Israel

We compared a colonic preparation with sodium picosulphate and magnesium citrate (SPS-Mg) to a polyethylene glycol electrolyte lavage (PEG-EL) solution for quality of bowel cleansing, patient discomfort and side effects.

Methods: Sixty-eight consecutive patients were randomly assigned to preparation with 3 sachets of SPS-Mg (16.5 gr each) (n=39) or 3 liters of PEG-EL (n=29) on the day before colonoscopy. Shortly before the procedure, each patient was interviewed to determine the degree of discomfort (from 1 = none or mild to 4 = excellent), and the extent of colonoscopy was noted.

Results: The 2 groups were similar in patient age, gender and origin, and indication for colonoscopy. Of the 29 PEG-EL patients, 4 (14%) did not complete the preparation because of side effects (nausea, vomiting and palpitations). The degree of discomfort was significantly greater with PEG-EL (mean score 2.3±0.7) than with SPS-Mg (mean score, 1.4±0.5) (P<0.01). Side effects were significantly more common in the PEG-EL group (41% vs. 26%, P<0.01). Using intention-to-treat analysis, bowel cleansing proved to be significantly better with SPS-Mg than with PEG-EL (mean scores±SD, 3.05±0.9 and 2.57±1.0, respectively, P<0.05). No significant difference was noted in the extent of colonoscopy between the 2 groups (the cecum was reached in 90% of the patients in both).

Conclusions: Colonic preparation with SPS-Mg is better tolerated, associated with significantly fewer side effects and results in higher quality bowel cleansing than preparation with PEG-EL.

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ASGE GUIDELINES: A STUDY OF APPROPRIATENESS AND USEFULNESS COMPARING A GASTROENTEROLOGY TRAINING PROGRAM, A GENERAL SURGERY RESIDENCY PROGRAM, AND A GASTROENTEROLOGY PRIVATE PRACTICE Kermit Richiez, Muhammed Iqbal, Mark F. Young, Eapen Thomas, Department of Internal Medicine (Gastroenterology), East Tennessee State University, James H. Quillen College of Medicine and VA Medical Center, Johnson City, TN

Wide availability of excellent instrumentation has made it possible for large numbers of differently trained physicians to perform endoscopic procedures, including Gastroenterologists, Surgeons and Family Practitioners. However, changing trends in medicine to more cost effective practice have made it important to place greater emphasis on appropriateness and usefulness. The ASGE has published guidelines for appropriate use of endoscopy. **Aim**: To compare a Gastroenterology Fellowship Program (GFP), a Surgery Residency (GSR), and a Private Gastroenterology Practice (PGP) with regards to adherence to ASGE guidelines and relevance. **Methods**: Three-hundred records of patients who underwent Esophagogastroduodenoscopy (EGD) were evaluated retrospectively. The indication for endoscopy was classified as indicated or not indicated according to the ASGE guidelines. EGDs not indicated were further classified as relevant, if a change in management was probable based on findings, or not relevant, if no change in management was probable. **Results**:

Group	N	Indicated	Not Ind.	Relevant	Not Relevant
GFP	100	91	9*	8/9 (89%)#	1/9 (11%)
GSR	100	47	53**	11/53 (21%)##	42/53 (79%)
PGP	100	80	20***	13/20 (65%)###	7/20 (35%)
Total	300	215 (72%)	82 (28%)	32/82 (39%)	50/82 (61%)

*p < .001 vs all other ;**p < .001 vs all other; *** p < .001 vs GSR, p = .023 vs GFP; # p< .001 vs GSR, not significant vs PGP; ## p < .001 vs all other; ### p < .001 vs GSR, not significant vs GFP.

Conclusions: The rate of inappropriate use of EGD was highest in the Surgery Residency group along with the lowest rate of relevant findings. Private Gastroenterology Practice also had a high rate of inappropriate usage, but relevant findings were not significantly different from Gastroenterology Fellowship. Appropriate use of EGD could be improved in all study groups. The ASGE guidelines could be more strictly applied.

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DOES PROPHYLACTIC STEROID ADMINISTRATION REDUCE THE FREQUENCY AND SEVERITY OF POST-ERCP PANCREATITIS?: RANDOMIZED PROSPECTIVE MULTICENTER STUDY. S. Sherman, G. Lehman, D. Earle, J. Watkins, M. Freeman, H. Parker, M. Ryan, J. Barnett, J. Johanson, J. Geenen, W. Silverman, P. Yakshe, A. Slivka, J. Flueckiger, M. Uzer, J. Goff, K. Dua, G. Aliperti, W. Jones, Indiana University Medical Center, Indianapolis, IN and the Midwest Pancreaticobiliary Group

Pancreatitis is the most common major complication of diagnostic and therapeutic ERCP occurring in 1-10% of patients. Although ERCP provides a unique opportunity to administer prophylactic therapy to limit the frequency and severity of post-procedure pancreatitis, no agent thus far studied has been effective in this regard. Corticosteroids have been shown to significantly elevate the functional C-1-esterase inhibitor levels, one of the major circulating protease inhibitors. Moreover, many of the events in the cascade of autodigestion may be inhibited by corticosteroids (e.g. blockage of complement and contact system activation). The aims of this study are to 1) determine whether prophylactic corticosteroids will reduce the frequency and severity of post-procedure pancreatitis, and 2) identify patient and procedure risk factors predictive of the development of post-ERCP pancreatitis. **METHODS**: This is a randomized prospective double-blind multicenter study. Patients receive either oral prednisone (40 mg) or placebo 15 hours and 3 hours prior to ERCP. A 160 variable database was prospectively collected on randomized patients. Standardized criteria are used to diagnose and grade the severity of post-procedure pancreatitis (GI Endosc 1991;37:383). Pancreatitis rates will be compared between the groups. Secondary analysis will involve logistic regression using patient and procedure characteristics to predict the risk of pancreatitis and the effectiveness of prophylaxis. **RESULTS:** 493 patients have been randomized. Pancreatitis has occurred in 62 (12.6%) and was graded mild in 40 (8.1%), moderate in 16 (3.2%) and severe in 6 (1.2%). There were no episodes of pancreatitis occurring after randomization and prior to the procedure. Side effects of the placebo and drug occurred in <2% and were primarily limited to mild dyspepsia. The projected enrollment is 2000; an interim analysis will be performed at 50% patient accrual. **CONCLUSIONS:** Although the risk factors for ERCP-induced pancreatitis have been identified, attempts to prevent this complication have been disappointing. Systemic corticosteroids may be a promising new therapy to reduce the incidence and severity of this complication.