W1078

Should Fundoplication Be Added at the Time of Gastrostomy Placement in Profoundly Handicapped Patients With Dysphagia?

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Background: Handicapped patients with advanced neurological impairment and dysphagia require gastrostomy feeding and are associated with gastroesophageal reflux disease (GERD). Concurrent fundoplication is often recommended at the time of gastrostomy placement (GP) in those patients because of avoiding long-term anti-reflux medication or preventing future reflux symptoms. Fundoplication has recently been thrown doubts about its indication in those patients because of unignorable complications and the high incidence of recurrence of GERD. It was aimed in this study to conduct a retrospective review of the outcome of handicapped patients with GP alone. Methods: The subjects consisted of 60 profoundly handicapped patients requiring tube feeding, aged 1 yr to 33 yrs (median 9 yrs), who underwent GP alone. The operative criteria included no or medically controllable reflux symptoms. Operative procedure was laparoscopic in 53 and open in 7. They were divided into two groups based on % esophageal total time pH<4.0 (reflux index:RI) evaluated with preoperative 24-hour esophageal pH monitoring; Group I (GI, n=37): RI<5.0 %, median age 7 yrs (2yrs-33 yrs), Group II (GII, n=23): RI≥5.0 %, median age 11yrs(1yr -21 yrs). Postoperative pH monitoring was performed in 26 GI patients and 20 GII. Follow-up period ranged 2 yrs to 8 yrs(median 4 yrs). Data are expressed as medians and ranges. Results: Postoperative medical management of GERD succeeded in 3 of 4 GI patients and 12 of 13 GII with lansoprazole, famotidine, and a herbal medicine, rikkunshito. A GI patient with chromosomal anomaly required fundoplication after GP because of intractable emesis. A GII with Cockayne Syndrome required gastrojejunal continuous feeding because of emesis and diarrhea. Other patients were successfully nourished with gastrostomy bolus feeding. Respiratory symptoms were ameliorated in a GI patient and 3 GII presumably due to the removal of stimulation by nasogastric tubes. Chronic gastric volvulus was corrected in 4. The postoperative RI increased significantly in GI patients (2.0% [0%-4.8%] vs. 4.1%[0.2%-11.9%], P=0.002), whereas decreased significantly in GII (11.8% [5.9%-67.2%] vs. 9.7%[1.0%-68.7%], P=0.048). Conclusions: Reflux symptoms and pathological esophageal acid exposure rarely deteriorate after GP in profoundly handicapped patients with dysphagia. GP alone is a less invasive and effective procedure to improve the quality of life in those patients. Concomitant fundoplication is unnecessary in most of them with adequate medical control of reflux symptoms.

W1079

Effect of Endoscopic Fundoplication With EsophyX Device on Proton Pump Inhibitors Usage in a Single Third Level Italian Care Center

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Background and study aim: previous studies demonstrated the long-term safety and sustained effect of endoscopic fundoplication with EsophyX device on the elimination of gastroesophageal reflux symptoms. Aim of the study was to assess the effect of endoscopic fundoplication with EsophyX device on proton pump inhibitors (PPI) usage in single Italian third level care center. Material and methods: between November 2006 and April 2009, twenty-two patients with gastroesophageal reflux symptoms underwent EF with EsophyX device. Effect of endoscopic fundoplication on the number of days in which patients assumed acid suppressive therapy to relieve their symptoms was assessed every 6-months on a written paper. Results: between November 2006 and March 2009 twenty-two patients (13 males, age 45 ± 14) underwent endoscopic fundoplication with EsophyX device. Mean follow up time was 24.5 ± 8.6 months (range 8-36 months). 16 patients (72.7%) were considered responsive to the endoscopic procedure; in particular, 12 (54.5%) patients completely stopped their acid suppressive therapy and 4 patients (18.2%) reduced PPI usage more than 50% of time. 6 patients (27.3%) were considered as non-responders and were still assuming their prior medical therapy at same dosage. Four non-responder patients underwent surgical fundoplication and only one patient, after the procedure, stopped the acid suppressive therapy. Considering the preoperative morphological aspect of gastroesophageal junction, responsive patients in comparison to non-responder patients presented a higher frequency of I-II Hill grade valve (13 vs 3, p=ns) and a lower incidence of III-IV Hill grade valve (2 vs 4, p=ns). Conclusions: endoscopic fundoplication with EsophyX device is able to achieve a long-lasting symptom relief in up to 73% of patients with gastroesophageal reflux disease. A preoperative I-II Hill grade valve seems to be related to a better outcome.

W1080

Quit Smoking Improves GERD Symptom and QOL

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Aim: It is known that cigarette smoking is associated with decrease of lower esophageal sphincter pressure and impairs esophageal clearance. Indeed, smoking and its intensity are considered as risk factors of gastroesophageal reflux disease (GERD). However, there is no study that has actually examined whether quit smoking would change GERD symptoms. The present study aimed to reveal whether quit smoking would improve GERD symptoms and QOL were investigated. **Methods:** This is a prospective study. Among patients who participated in 12 week quit smoking program, 33 cases who gave informed consent were interviewed with the Frequency Scale for the Symptoms of GERD (FSSG) questionnaire, which has 7 questions related to reflux and 5 to dysmotility symptoms and SF8™ QOL questionnaire. Interviews were performed at baseline and during the program at 2 week, 4 week, 8 week and 12 week. On FSSG, items were classified into total score (TS), reflux score (RS) and dyspepsia score (DS). SF8™ was classified into physical component summary (PCS) and mental component summary (MCS). **Results:** There were 22 male and 11 female. Average age, BMI and duration of smoking were 54.8±13.0 yr, 22.9±4.0 and 33.5±12.5 yr, respectively. All cases managed to quit smoking. TS, RS, DS, PCS significantly improved at 12 week when program ended. Results are shown in the table. **Conclusions:** Not only GERD symptoms but also QOL was significantly improved by quit smoking, indicating that quit smoking could be one of the options for treatment strategy of GERD.

GERD symptom and QOL during the quit smoking program.

	Baseline	2 week	4 week	8 week	12 week
TS	7.93±1.62	5.74±1.58 P=0.006	6.03±1.21 P=0.023	5.36±1.35 P=0.079	4.86±1.21 P=0.002
RS	3.86±0.86	2.93±0.93 P=0.004	2.73±0.64 P=0.033	2.57±0.71 P=0.135	2.21±0.62 P=0.002
DS	4.07±0.83	2.81±0.70 P=0.005	3.30±0.63 P=0.089	2.79±0.73 P=0.082	2.66±0.64 P=0.006
PCS	47.3±1.1	50.6±0.9 P=0.039	51.1±0.9 P=0.007	51.3±1.1 P=0.004	50.6±1.0 P=0.031
MCS	48.9±1.3	51.1±1.3 P=0.170	51.1±0.9 P=0.040	50.7±1.0 P=0.408	50.2±1.3 P=0.277

Data are shown as mean±SE p value is express as vs baseline.

W1081

Para-Oesophageal Hernia Repair: An Evaluation of Tailored Laparoscopic Repair, Post-Operative Patient Outcome and Readmission Incidence

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Aims: This study aims to evaluate the effectiveness, immediate and late outcome of Para-oesophageal hernia repair (POHR), in the alleviation of pre-operative symptoms. Methods: The medical records of 29 patients, who underwent POHR over a 5 year period (2004 - Aug 2009) were surveyed for immediate post-operative improvement of typical POH symptoms of bloating, pain, dysphagia and nausea/vomiting and for further late adverse effects, symptom recurrence at follow-up. Results: Of the cohort, 19 were female and 10 male of mean and median age 69 and 61 years respectively, with postoperative stay ranging from 1 to 9 days. The majority (20/29) were admitted with acute symptoms. 18 of the patients were found, intra-operatively to have a POH only while the remaining 11, in addition, had a gastric volvulus. All underwent laparoscopic reduction of the hernia to some degree; complete reduction was achieved in 21, while the remainder had incomplete reduction, due to a short esophagus. Gastric volvulus was treated by correction and gastropexy. Only 2 (13.3%) of the cohort suffered any adverse peri-operative period (urinary retention and respiratory tract infection requiring antibiotics, respectively). None of the cohort was readmitted following discharge. The median follow up period for first and second assessment was 5 weeks and 18 weeks respectively. 21 (77%) considered the improvement to be 'excellent' at the end of second review with complete alleviation of symptoms. 1 was lost to follow up, 1 was followed up elsewhere and 3 have persisting residual symptoms although are gaining weight. The remaining patient, suffering from nausea and abdominal pain after 8 months was found to be suffering from sigmoid divertculosis. Conclusion: Though a small cohort, post-operative POHR outcome is, for the great majority of patients excellent. Treatment has to be tailored to symptoms and the physical fitness of these patients.

W1082

What is the Optimum Duration of Hospital Stay Following Laparoscopic Nissen Fundoplication(LNF)?

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We sought to investigate the appropriateness of the increasing trend towards a shorter hospital stay following complex laparoscopic procedures. Prospectively recorded patient details were scrutinised by a single investigator (NA) and a database was populated. All operations were performed by the senior author/by a resident under close supervision(YKSV). Outcome parameters for the study were duration of hospital stay, pain relief at discharge, overall patient satisfaction and symptom relief at follow-up. All these were assessed on a 5-point Likert scale, which for analysis was collapsed into a binary response for each of the outcome parameters. RESULTS: From Oct 2004 to May 2009, 189 patients underwent LNF at a large teaching hospital in the North of England. A total of 64 (Group C) patients were discharged within a day of admission - 26 (24/189; 14%) patients were discharged by the end of the working day (18:00 hrs) [Group A - daycase] and an additional 38 (38/189; 20%) were discharged with 24 hours of admission [Group B]. Group D was the longer stay cohort; out of whom 107 (57%) were discharged within 48 hours and 8 were discharged at varying lengths of stay 2-6 days (median 3). Group C (Group A + Group B) (n=64; 34% overall) was entirely in the time period 2007 onwards and in this time period 71.5% (74/104) of our patients have been discharged within 24 hours. Seven patients, all from the day-case group were seen postoperatively in the Emergency Department with upper GI symptoms or abdominal pain and 5 patients were readmitted. At first follow-up [6 (3-11) median (range) weeks] patients assessment of their pain relief at discharge and satisfaction and symptom relief scores are summarised in the Table. CONCLUSIONS: Group B patients appear to demonstrate maximum symptom relief, adequate pain relief and greatest overall satisfaction with care. The longer stay patients appear to have been the most dissatisfied whilst the working day discharge group demonstrated significantly poorly. We conclude that a short hospital stay (less than 24 hours) and not necessarily a working day discharge is appreciated as adequate by patients. This appears to be linked to adequacy of symptom relief at short-term follow-up. This needs prospective evaluation.

Table