A SINGLE CENTRE PROSPECTIVE STUDY ON FACTORS PREDICTING MALIGNANCY IN PATIENTS WITH DYSPEPSIA

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Background Cultural, local dietary and social factors, the frequency of malignancy in the population studied are known to affect the epidemiology of dyspepsia. Clinical features are highly unreliable in determining the aetiology of dyspepsia. Alarm features are known to help in identifying underlying malignancy in patients with dyspepsia. However, very few studies are available from Asia validating the role of alarm features in dyspepsia.

Methods 900 consecutive patients with dyspepsia were included in the study after recording relevant clinical details such as symptoms, duration, age, weight and alarm features. All patients underwent standard upper gastrointestinal endoscopy, and the findings were recorded. All suspected malignancies were confirmed with histopathology. All malignancies and alarm features were statistically analysed using chi-square test for non-parametric data while ANOVA and students T-test were used for parametric data.

Results On endoscopy, malignant lesions were seen in 5.5% of our subjects whereas alarm features were present in 22.9% of our subjects. Among the malignant lesions, esophageal malignancy was seen in 2.2%, gastric malignancy in 3.1% with the rest being a duodenal malignancy. All the alarm features put together had a sensitivity and specificity of 92% and 81.2% respectively for predicting malignancy. Highest sensitivity and specificity was for weight loss (76%) and supraclavicular lymph nodes (99.8%) respectively. Based on ROC curve the optimal age to begin malignancy screening was 46.5 years.

Conclusions Alarm features are a reasonable and effective tool for identifying upper gastrointestinal malignancies in patients with dyspepsia. Amongst all the alarm features weight loss is the best screening tool. The appropriate age to begin screening for malignancy appears to be 46.5 years.

DIAGNOSTIC YIELD AND THERAPEUTIC POTENTIAL OF SINGLE BALLOON ENTEROSCOPY IN CHILDREN

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Background Evaluation of small bowel diseases has been revolutionised with the advent of capsule endoscopy and balloon assisted enteroscopy (BAE). As opposed to capsule endoscopy, BAE enables tissue biopsies and performing therapeutic procedures. BAE is an effective tool for the diagnosis and management of small bowel diseases in adults. However, data is limited in the paediatric population.

We aimed to evaluate the diagnostic yield and therapeutic potential of BAE in the paediatric population.

Methods The data of all the children under 18 years of age who underwent BAE with single balloon enteroscope (SBE) from August 2011 to December 2017 was analysed for the role of SBE in diagnosis and management of small bowel disease.

Results A total of 144 children (mean age 15.09 years; range 4–18 years, boys 96%) underwent SBE during the study period. Indications were pain abdomen (n=87), chronic diarrhoea (n=33), obscure gastrointestinal bleeding (OGIB) (n=19) and recurrent vomiting (n=9). Oral enteroscopy was performed in 78 children with a mean insertion length of 183.35±62.51 cm beyond the duodeno-jejunal flexure and mean procedure duration of 40.2±16.08 min. Retrograde enteroscopy was performed in 66 children with a mean insertion length of 125.70±45.24 cm and mean duration of 42.04±10.05 min. Diagnostic yield in children presenting with pain abdomen, chronic diarrhoea, OGIB and vomiting was 41.37%, 44.82%, 57.89% and 22%, respectively. In children with pain abdomen and significant weight loss, the diagnostic yield was 84.21%. Therapeutic procedures were done in 8 children (polyectomy in 5 and argon plasma coagulation in 3), and 11 patients underwent surgery. In addition, four patients underwent intra-operative enteroscopy for OGIB, three underwent small bowel resection, one patient underwent gastro-jejunoanastomosis for duodenal ulcer. No major complications were observed.

Conclusions SBE is a safe and effective tool for diagnosis and management of small bowel diseases in children. Pain abdomen was the most common indication for enteroscopy, and diagnostic yield was especially high in patients presenting with pain abdomen and associated significant weight loss.

USEFULNESS OF ENDOSCOPIC ULTRASONOGRAPHY FEATURES IN PREDICTION OF MALIGNANT GASTRIC GASTROINTESTINAL STROMAL TUMOUR

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Background Although many endoscopic ultrasonography (EUS) features have been introduced, preoperative determination of the malignant risk of gastric gastrointestinal stromal tumours (GISTs) is difficult. This study aimed to investigate whether EUS features can predict the malignant gastric GISTs.

Methods We retrospectively reviewed patients who had surgically resected gastric GISTs with high-risk EUS features such as non-oval shape, ulceration, irregular border, heterogeneity, echogenic foci, hypoechoic foci, cystic spaces, and calcification. The malignant risk of GISTs was based on the criteria of tumour size and mitotic count according to 2013 World Health Organisation classification and 2008 National Institutes of Health consensus. The correlations of high-risk EUS features with the malignant gastric GISTs were evaluated.

Results A total of 31 patients, including 20 males and 11 females, were enrolled. The mean age was 61.6±10.9 years old. The mean tumour size was 3.4±2.9 cm. With regards to the malignant risk, 7 (23%) tumours had a very low risk, 10 (32%) tumours had a low risk, 1 (3%) tumour had an intermediate risk, 10 (32%) tumours had an intermediate or high risk, and 3 (10%) tumours had a high risk. Twelve (39%) patients were diagnosed of malignant GISTs and had a larger proportion of tumour size >2 cm (92%–53%), irregular border (75%–26%), and cystic change (33%–0%) than those with benign GISTs (p<0.05). In multivariate logistic regression
analysis, tumour size >2 cm (odds ratio: 49.1, 95% CI: 1.2 to 1990.1, p=0.04) and irregular border (odds ratio: 27.5, 95% CI: 1.0 to 747.0, p=0.05) were independent factors of malignant GISTs.

Conclusions Tumour size >2 cm and irregular border on EUS can be used to predict the malignant gastric GISTs.

IDDF2018-ABS-0218 EFFICACY OF FAECAL MICROBIOTA MAINTENANCE WITH FAECAL MICROBIOTA USE OF MAGNETIC RESONANCE IMAGING

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10.1136/gutjnl-2018-IDDFabstracts.161

Background Faecal microbiota transplantation (FMT) has been shown to be effective in active ulcerative colitis (UC) by targeting gut dysbiosis. We assessed the role of FMT in steroid-dependent UC patients.

Methods In this trial, patients with steroid-dependent active UC were treated with FMT using random unrelated donors, by the colonoscopic approach, at weeks 0, 2, 6, 10, 14, 18 and 22. Patients with steroid-dependent UC treated who were treated without FMT in past, with azathioprine as a steroid-sparing agent were taken as historical controls. The primary outcome was the achievement of steroid-free clinical remission (Mayo score=30% and ≥3 points compared to baseline) and endoscopic remission (Mayo score 0 or 1). 16 s rRNA gene sequencing was done for analysing changes in microbial composition after FMT.

Results Twenty-eight patients (50% males, aged 37.21±15.25 years) with UC in clinical remission were randomised to groups A and B. At the end of 48 weeks, none of the patients in either group suffered a clinical relapse (p=1). Deep remission was noted in significantly higher number of patients with FMT (n=12, 85.71%) when compared with placebo (n=4, 28.57%) (p=0.002). Histological remission was twice as high in patients treated with FMT (n=8, 57.14% vs placebo, n=4, 28.57%; p=0.13). Rate of endoscopic response was also higher with FMT (n=8, 57.14%) when compared to placebo (n=0, zero%) (p=0.001). No serious adverse events were noted.

Conclusions Maintenance with FMT can enhance achievement of deep remission and histological remission in patients with UC in clinical remission.

IDDF2018-ABS-0222 USE OF MAGNETIC RESONANCE IMAGING TO EVALUATE THE EFFECTIVENESS OF TREATMENT FOR PERIANAL FISTULIZING CROHN’S DISEASE

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10.1136/gutjnl-2018-IDDFabstracts.163

Background Data on the radiologic evaluation of perianal fistulizing Crohn’s disease (PFCD) naive to anti-tumour necrosis factors treated with FMT compared to 26.3% (10/38) in historical controls treated with azathioprine (p=0.065). Clinical response (31/41, 75.6%) and endoscopic remission (26/41, 63.4%) with FMT were significantly higher than controls (55.3% and 39.5% respectively, p=0.005) (IDDF2018-ABS-0218 Figure 2). Adverse events necessitating discontinuation were noted in 3/38 (7.89%) controls treated with azathioprine, but not with FMT.

Conclusions A multi-session FMT by a colonoscopic route is a promising therapeutic option for steroid-dependent UC patients, as it induces clinical remission and withdrawal of steroids in 46.3% and 75.6% patients respectively.

Abstract IDDF2018-ABS-0218 Figure 1 Patient flow diagram uc ulcerative colitis aza azathioprine fmt faecal microbiota transplantation

Results Between September 2015 – September 2017, 41 patients with steroid-dependent UC underwent FMT, 33 completed seven sessions over 22 weeks while 8 discontinued treatment (non-response: 5, lost to follow up: 2, fear of side effects: 1) (figure 1). At week 22, the primary endpoint (steroid-free clinical remission) was achieved in 46.3% (19/41) patients treated with FMT compared to 26.3% (10/38) in historical controls treated with azathioprine (p=0.065). Clinical response (31/41, 75.6%) and endoscopic remission (26/41, 63.4%) with FMT were significantly higher than controls (55.3% and 39.5% respectively, p=0.005) (IDDF2018-ABS-0218 Figure 2). Adverse events necessitating discontinuation were noted in 3/38 (7.89%) controls treated with azathioprine, but not with FMT.

Conclusions A multi-session FMT by a colonoscopic route is a promising therapeutic option for steroid-dependent UC patients, as it induces clinical remission and withdrawal of steroids in 46.3% and 75.6% patients respectively.

IDDF2018-ABS-0221 MAINTENANCE WITH FAECAL MICROBIOTA TRANSPLANTATION ENHANCES DEEP REMISSION IN PATIENTS WITH ULCERATIVE COLITIS IN CLINICAL REMISSION

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10.1136/gutjnl-2018-IDDFabstracts.162

Background Faecal microbiota transplantation (FMT) is beneficial in patients with active ulcerative colitis (UC), but its role in the maintenance of clinical remission and mucosal healing has not been assessed.

Methods This was a prospective, double-blind, randomised placebo-controlled trial conducted at Dayanand Medical College and Hospital, India. Twenty-eight patients with UC in clinical remission (Mayo Score=1) and histological remission (Nancy grade 0, 1) at 48 weeks.

Results Twenty-eight patients (50% males, aged 37.21±15.25 years) with UC in clinical remission were randomised to groups A and B. At the end of 48 weeks, none of the patients in either group suffered a clinical relapse (p=1). Deep remission was noted in significantly higher number of patients with FMT (n=12, 85.71%) when compared with placebo (n=4, 28.57%) (p=0.002). Histological remission was twice as high in patients treated with FMT (n=8, 57.14% vs placebo, n=4, 28.57%; p=0.13). Rate of endoscopic response was also higher with FMT (n=8, 57.14%) when compared to placebo (n=0, zero%) (p=0.001). No serious adverse events were noted.

Conclusions Maintenance with FMT can enhance achievement of deep remission and histological remission in patients with UC in clinical remission.