PWE-137 FUNCTIONAL GASTROINTESTINAL DISORDERS(FGID) IN SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) PATIENTS

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10.1136/gutjnl-2018-BSGAbstracts.431

Introduction Systemic lupus erythematosus (SLE) is a multisystem autoimmune connective tissue disorder that affects many different organ systems with significantly more women affected than men. This study was carried out to assess the prevalence of Functional gastrointestinal disorders(FGID) in patients diagnosed with SLE.
Methods Data was collected from patients with a confirmed diagnosis of SLE and no organic gastrointestinal disorder using SF36 RAND and Rome IV Diagnostic questionnaire and compared to a control group to assess the burden of GI symptoms in these patients. Data analysis was carried out using Microsoft Excel and SPSS version 25 (IBM Corporation, America).
Results 101 SLE patients (all female; age range 31–56 years, mean 41) and 108 female controls (range 21–60 mean age 42.4), were included. 71 (70.29%) SLE patients reported abdominal symptoms which met the criteria for diagnosis of at least 1 FGID according to Rome IV diagnostic criteria compared to 37% of controls (OR 4.97: 95% CI:2.7025 to 9.1401 p<0.0001). Both upper and lower FGIDs were frequently reported with 37 patients (36%) meeting the criteria for more than 1 FGID.

All SLE patients with FGID scored lower (statistically significant p<0.01) on the mean scores of the eight parameters (physical functioning, role limitations due to physical health, role limitations due to emotional health, energy/fatigue, emotional wellbeing, social functioning, pain, general health) measured by the RAND SF36 as compared to the control group. (mean scores 59.62 vs 71.23, U-value 0, Z-Score −2.50672, p-value.00604).
Conclusions Functional gastrointestinal disorders are very common in patients with SLE and adversely affect the overall quality of life. Treatment of these disorders with a multi-disciplinary approach may help in improving the quality of life for these patients.

PWE-138 REPETITIVE BELCHING IS PREDICTIVE OF SUPRAGASTRIC BELCHING DIAGNOSIS

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10.1136/gutjnl-2018-BSGAbstracts.432

Introduction Belching is common in gastro-oesophageal reflux disease (GORD). Diaphragmatic breathing can reduce belching and GORD symptoms, but only patients with excessive supragastric belching (SGB) responded to this treatment. 24 hour pH-impedance study is the gold standard to diagnose SGB but is expensive and invasive. Our study aimed to identify clinical factors that can predict excessive SGB (>13/day) in GORD patients.
Methods We prospectively analysed patients with a belching visual analogue scale (VAS) score ≥6 and a clinical or endoscopic diagnosis of GORD. All patients underwent 24 hour pH-impedance studies off medications. Patients were given questionnaire on belching symptoms, including belching VAS, belching frequency, repetitive nature of belching and ability to control belching. GORD symptoms were evaluated via Reflux Disease Questionnaire (RDQ), somatization scores via PHQ15 and mood disorders via Hospital Anxiety and Depression Scales (HADS). Statistical analysis via independent t-test and Chi2 test were done for univariate analysis, while logistic regression analysis was used for multivariate analysis of clinical factors most predictive of excessive SGB.
Results We recruited 36 patients between April 2015 and October 2016 (25 women; mean age 45.5±12.7). 32 patients had excessive SGB, while 4 had predominantly gastric belching on pH-impedance studies. Repetitive belching and RDQ regurgitation score ≥2 were significantly more likely in patients with excessive SGB, but only repetitive belching was significant on multivariate analysis. Repetitive belching on questioning has a sensitivity of 93.4% and specificity of 75% for SGB diagnosis, positive predictive value 96.8% and negative predictive value 60.0%.
Conclusions We identified that a simple questioning on the repetitive nature of belching can be used as a screening tool to predict SGB in belching patients, and hence predict response to diaphragmatic breathing exercises.

PWE-139 EFFICACY OF PHARMACOLOGICAL THERAPIES FOR THE TREATMENT OF OPIOID-INDUCED CONSTIPATION: SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS

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10.1136/gutjnl-2018-BSGAbstracts.433

Introduction

Opioids are increasingly prescribed in the West, and have deleterious gastrointestinal consequences. Pharmacological therapies to treat opioid-induced constipation (OIC) are available, but their relative efficacy is unclear. We performed a systematic review and network meta-analysis to address this deficit in current knowledge.
Methods We searched MEDLINE, EMBASE, EMBASE Classic, and the Cochrane central register of controlled trials through to December 2017 to identify randomised controlled trials (RCTs) of pharmacological therapies in the treatment of adults with OIC. Trials had to report a dichotomous assessment of overall response to therapy, and data were pooled using a random effects model. Efficacy and safety of pharmacological therapies was reported as a pooled relative risk (RR) with 95% confidence intervals (CIs) to summarise the effect of each comparison tested, and ranked treatments according to their P-score.
Results Twenty-seven eligible RCTs of pharmacological therapies, containing 9149 patients, were identified. In our primary analysis, using failure to achieve an average of ≥3 bowel movements (BMs) per week with an increase of ≥1 BM per week over baseline, or an average of ≥3 BMs per week, to define non-response the network meta-analysis ranked naloxone first in terms of efficacy (RR=0.65; 95% CI 0.52 to 0.80, P-score 0.84), and it was also the safest drug. When non-response to therapy was defined using failure to achieve an average of ≥3 bowel movements (BMs) per week, with an

Abstract PWE-139 Table 1 Relative risk with 95% confidence intervals in parentheses. Treatment in the top left is ranked as 'best'

Naloxone										
0.97 (0.75; 1.25)	Naldemedine									
0.96 (0.73; 1.27)	0.99 (0.80; 1.24)	Alvimopan								
0.88 (0.64; 1.21)	0.91 (0.69; 1.19)	0.91 (0.68; 1.23)	Methylnaltrexone SC							
0.87 (0.62; 1.22)	0.90 (0.68; 1.20)	0.91 (0.66; 1.23)	0.99 (0.70; 1.41)	Prucalopride						
0.83 (0.60; 1.16)	0.86 (0.64; 1.15)	0.86 (0.63; 1.17)	0.95 (0.67; 1.34)	0.95 (0.66; 1.37)	Bevenopran					
0.76 (0.58; 1.01)	0.79 (0.63; 0.99)	0.79 (0.62; 1.02)	0.87 (0.65; 1.17)	0.88 (0.64; 1.19)	0.92 (0.68; 1.25)	Naloxegol				
0.71 (0.51; 0.99)	0.74 (0.56; 0.97)	0.74 (0.55; 1.00)	0.81 (0.58; 1.14)	0.82 (0.57; 1.16)	0.86 (0.60; 1.22)	0.93 (0.69; 1.26)	Methylnaltrexone			
0.71 (0.55; 0.92)	0.73 (0.60; 0.90)	0.74 (0.58; 0.93)	0.81 (0.61; 1.07)	0.81 (0.60; 1.10)	0.85 (0.63; 1.15)	0.93 (0.74; 1.17)	1.00 (0.75; 1.33)	Lubiprostone		
0.65 (0.52; 0.80)	0.67 (0.59; 0.77)	0.67 (0.57; 0.80)	0.74 (0.58; 0.94)	0.74 (0.58; 0.96)	0.78 (0.61; 1.01)	0.85 (0.71; 1.01)	0.91 (0.71; 1.17)	0.92 (0.79; 1.07)	Placebo	

increase of ≥1 BM per week over baseline, naldemidine was ranked first (RR=0.66; 95% CI 0.56 to 0.77, P-score 0.91).

Conclusion In network meta-analysis, naloxone and naldemidine appear to be the most efficacious treatments for OIC. Naloxone was the safest of these agents.

League Table of Results for Failure to Achieve an Average of ≥3 BMs per Week with an Increase of ≥1 BM per Week Over Baseline or an Average of ≥3 BMs per Week.

PWE-140 VALIDATION OF THE 'FAILURE TO PROVIDE ADEQUATE RELIEF' (F-PAR) SCALE IN A SPECIALIST CLINIC SETTING

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10.1136/gutjnl-2018-BSGAbstracts.434

Background Treatment of chronic idiopathic constipation is empiric, based on step-wise approach. If first-line conservative treatment (lifestyle and laxatives) do not relieve symptoms, secondary approaches with prokinetic or secretagogue drugs are used before considering hospital-based care (biofeedback, psychosocial support, transanal irrigation (TAI), surgery). Nevertheless, patients are often unsatisfied with care and fail to progress to adequate levels of therapy. The 5-point Failure to Provide Adequate Relief (F-PAR) scale was developed to facilitate the recognition of when to move from one step to the next. The aim of this study was to validate F-PAR in a tertiary clinic setting.

Methods We studied 403 consultations of 331 patients (262 women, mean age 41). *All fulfilled* Rome III/IV diagnostic criteria for chronic constipation. Immediately prior to clinical assessment by one of 2 experienced physicians, participants completed the F-PAR scale; patients were seen blind to the F-PAR result.Consultant clinic assessment was undertaken to identify efficacy of the current management as the gold standard.

Results Table 1 shows detail of the 403 consultations, in 200 of which clinical assessment identified inadequate relief with current therapy. Neither duration nor types of treatment were correlated with relief. All individual items of the F-PAR had Specificity >96% but poor sensitivity (15%–67%).Cumulatively, none of the subjects with ≥4 positive responses had adequate relief. By contrast, there was excellent sensitivity and specificity for patients with no positive F-PAR replies.

Abstract PWE-140 Table 1 Previous treatment and efficacy.

Pre-consultation Treatment	Number of patients	Mean duration of treatment (week)	Adequate relief (Clinical)
Laxatives	81	14.4	42%
Supps/enema	22	11.8	50%
Prucalopride	41	8.2	44%
Lubiprostone	12	7.6	33%
Biofeedback	97	23.8	54%
TAI	20	11.1	65%
SNS/Surgery	3	10.3	33%
Combination	127	16.1	54%
Total	403	16.0	203

Abstract PWE-140 Table 2 Positive F-PAR items correlated to clinical assessment of relief (PPV and NPV = positive and negative predictive value)

	Adequate relief (Clinical) n≥203	Inadequate relief (Clinical) n≥200	Sensitivity	Specificity	PPV	NPV
Q1.Bowel frequency inadequate	5	71	53	98	95	68
Q2.Strain most occasions	6	89	67	97	96	60
Q3.Stool hardness	3	21	15	99	91	54
Q4.Onset other symptom	2	57	42	99	98	63
Q5.Current therapy poor tolerable	8	80	59	96	94	70
1 FPAR replies	10	41	27	95	84	57
2 FPAR replies	4	67	39	98	95	62
3 FPAR replies	2	22	14	99	93	54
4 FPAR replies	0	8	12	100	100	53
5 FPAR replies	0	9	9	100	100	53
0 FPAR replies	187	1	92	100	99	93

Conclusion The F-PAR has excellent specificity, suggesting it is a useful confirmatory test to confirm a clinical suspicion of inadequate relief. Good sensitivity is only seen if there are no positive FPAR replies, implying the F-PAR is only of screening value when there is high likelihood of treatment satisfaction. As such, the F-PAR may have a role in confirming efficacy of treatments in trials of therapy for chronic constipation.