Of the 89 NANRA patients, 29% had an AD including Systemic Lupus Erythematosus, Scleroderma, Sjögren syndrome and Antisynthetase syndrome (n=25, M:F 3:7, average age ≥48). One had Myotonic Dystrophy (n=1); 11% (n=10) had hypersensitive oesophagus; 6% (n=5) had surgery for atresia, oesophageal spasm, or gastric cancer; 2% (n=2) had EoE and in 2% (n=2) of patients AD screen and EoE screen were normal. The remaining 50% of NANRA patients (n=44) had an unknown cause but incomplete investigations (no screen for AD: 97.7%; no biopsy: 67.4%).

Conclusions 1. The principal cause of OA is achalasia; it shouldn’t be dismissed as a cause even if the IRP is <15 mmHg as 6.5% (n=12) of patients with achalasia and OA had IRP <15 mmHg but typical radiological findings.

2. GORD is present in 41% of patients but it is unclear whether it is a cause or effect of OA, therefore the finding of GORD should not stop further investigation.

3. Patients with OA are under investigated for AD and EoE. 50% of patients with NANRA had incomplete investigations potentially losing the opportunity to identify other aetiologies. It is unclear whether NANRA patients should be routinely tested for AD or for EoE, or whether this should be done only in selected cases.

**OWE-032** A RANDOMISED PLACEBO-CONTROLLED TRIAL OF A MULTI-STRAIN PROBIOTIC FORMULATION. (BIO-KULT®) IN THE MANAGEMENT OF IBS-D

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10.1136/gutjnl-2018-BSGAbstracts.420

Introduction Increasing evidence supports the viewpoint that alterations in the diversity and function of gastrointestinal bacteria contributes to IBS, and that increasing the mass of beneficial species, by consuming probiotics, may lower pathogenic bacteria numbers and help alleviate symptoms. Methods In this double-blind trial, a total of 360 adult patients with moderate-to-severe symptomatic diarrhoeapredominant IBS (IBS-D) were randomised to receive either treatment with the multi-strain probiotic Bio-Kult (14 different bacterial strains) or placebo for 16 weeks. The primary outcome measure was change in abdominal pain. The secondary outcomes included frequency of bowel motions, overall change in IBS-severity scoring system (IBS-SSS) and IBS specific quality of life (IBS-QoL).

Results In comparison to placebo, treatment with probiotics significantly alleviated the severity of abdominal pain in patients with IBS-D: 69% reduction for probiotic versus 47% for placebo (p<0.001), equating to a 145 point reduction on the IBS-SSS. The level of patients rating their symptoms as moderate-to-severe was reduced from 100% at baseline to 14% in the multi-strain probiotic group by follow-up (month 5) versus 48% for placebo (p<0.001). In addition, the number of bowel motions per day from month 2 onwards was significantly reduced in the probiotic group compared with the placebo group (p<0.05). In addition to relieving symptoms, the probiotic markedly improved all dimensions of quality of life in the 34-item IBS-QoL questionnaire. No serious adverse events were reported.

Conclusions The multi-strain probiotic was associated with significant improvement in symptoms in IBS-D patients, and was well-