steroids and 29 received immunomodulatory therapy (27 azathioprine, 3 methotrexate, 1 cyclosporin, 2 6MP, 10 infliximab, 6 adalimumab). Seven deficient patients (4 CD, 3 UC) required a colectomy and the mean 25-OHD level in this group was 10.7 (range 4.0–20.1 ng/ml). Mean time to surgery was 3.6 years (range 0–8 years). Of the CD patients 1 had a subtotal colectomy, 3 had hemicolectomy and of the UC patients 2 had subtotal colectomy and 1 had total colectomy.

Conclusion There was a high prevalence of Vitamin D deficiency although assessment was suboptimal and probably reflective of a wider experience. Patients with vitamin D deficiency appeared to have a more aggressive disease course. The role of vitamin D in IBD is a science in evolution underpinning exciting implications for research. Meanwhile vitamin D deficiency is under-recognised and consequently undertreated with likely implications for adequate disease control in this potentially vulnerable group.

Disclosure of Interest None Declared

PTU-062 VALUE OF MRI IN PREDICTING SEVERE OUTCOME IN SMALL BOWEL CROHN'S DISEASE

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Introduction The optimal approach to managing terminal ileal (TI) Crohn's disease remains to be defined. It is unclear at what stage surgery or biological therapy should be offered and current clinical and biochemical parameters offer poor prediction of disease course. Small bowel MRI scanning (SBMRI) has been correlated with endoscopic and histological disease severity in Crohn's disease and may offer better global assessment of the extent and severity of disease. We aimed to determine which MRI features might predict the need for surgery or biological therapy.

Methods 48 sequential patients with Crohn's disease who underwent SBMRI in a 20 month period to Feb 2011 were identified from a radiological database. 8 patients were excluded due to predominant colonic disease. All remaining 40 patients had confirmed isolated TI disease. Standard management with escalation of therapy via immunomodulators, biological agents and surgery based on clinical follow up was applied. Patients were followed for a minimum of 2 years after the initial MRI. MRI scanning was performed using oral fluid load, IV buscopan, T1/2 axial, coronal and dynamic post contrast sequences. The images were reviewed by a radiologist blinded to outcome of cases and key abnormal features recorded (mesenteric abnormalities, wall thickness > 6 mm, disease extent > 15 cm or proximal dilatation > 25 mm). Patients were then divided into 2 groups, those requiring biological therapy or surgery (severe) and those managed with 5ASA or immunomodulators alone (non severe).

Results The characteristic of the two groups is shown in the table. Means given unless stated.

Abstract PTU-062 Table

	n	Age	CDAI at MRI	CRP at MRI	Years post diagnosis	Previous surgery (%)	Immunomodulator use (%)
A Non severe	20	36	77	19	9.9	45	45
B Severe	20	42	120	30	9.8	45	75

6/20 patients in the non-severe group (A) had two or more adverse radiological features compared with 12/20 in the severe (B) group ($p = 0.06$). However, only 3/20 patients had lumen > 25 mm or extent > 15 cm in A compared with 15/20 in B ($p < 0.001$). Wall thickness and mesenteric involvement were not associated with a

severe outcome. Disease extent and proximal luminal diameter were significantly associated with surgery ($p = 0.02$ and $p = 0.0001$). 85% of patients who eventually required surgery had either proximal lumen > 25 mm or disease extent > 15 cm.

Conclusion Two or more adverse radiological MRI features are associated with the need for surgery or biological therapy. Small bowel dilatation > 25 mm proximal to the disease segment and disease extent > 15 cm are particularly associated with the need for surgery. These MRI findings may be helpful in deciding appropriate longer term strategies for managing these patients.

Disclosure of Interest None Declared

PTU-063 ASSESSMENT OF SLEEP IMPAIRMENT IN PATIENTS WITH CROHN'S DISEASE: RESULTS FROM THE USTEKINUMAB CERTIFI STUDY

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Introduction To describe the extent of sleep impairment reported in CERTIFI (Ph2 evaluating UST in inducing & maintaining clinical response & remission) using Jenkins Sleep Evaluation Questionnaire (JSEQ) & establish a clinically meaningful improvement threshold for JSEQ.

Methods Pts with moderate-to-severe CD (CDAI ≥ 220 & ≤ 450) who had previously failed or were intolerant to ≥ 1 anti-TNF were randomised to PBO/UST induction at wk0. Primary endpt was clinical response (≥ 100 -pt reduction in CDAI from BL) at wk6. Sleep impairment assessed using JSEQ (total score 0–20; higher scores indicate greater sleep impairment) at BL&wk6. Relationships between BL sleep impairment, clinical disease activity (CDAI), & HRQoL impact (IBDQ) evaluated using Pearson correlation. Clinically meaningful improvement threshold of JSEQ was established with the anchor-based [clinical response by reduction in CDAI of ≥ 70 -pt or clinically meaningful improvement (≥ 16 -pt) in IBDQ] & distribution-based (change by one-half of the standard deviation [SD] of BL JSEQ score) methods. Prop of pts who achieved clinically meaningful improvements in JSEQ at wk6 was determined & compared.

Results At BL, both grps ($n = 526$) experienced similar degree of moderate sleep impairment, with JSEQ scores (mean $\pm$ SD) of 11.0 ± 4.30 (PBO) & 11.0 ± 4.59 (UST), resp. About 60% were "waking up feeling tired and worn out"; about 30–35% of pts had trouble falling asleep, staying asleep, & woke up several times during the night for 15–30 days in the previous month. At BL, JSEQ was correlated with CDAI ($r = 0.19$, $p < 0.0001$) & IBDQ ($r = -0.39$, $p < 0.0001$). Using the anchor-based method, pts who achieved vs didn't achieve clinically meaningful improvements in CDAI or IBDQ at wk6 vs BL, reported improvements (mean $\pm$ SD) from BL in JSEQ of -2.52 ± 4.43 vs -0.58 ± 3.51 & -2.68 ± 4.16 vs -0.16 ± 3.45 , resp. Using distribution-based method, the JSEQ clinically meaningful improvement threshold was 2.25 (SD of BL JSEQ = 4.50). 2 potential thresholds for clinically meaningful improvement in JSEQ (eg. reduction of > 2 or > 3 points from BL JSEQ score at wk6) were derived. More pts who received UST induction achieved both thresholds at wk6 (Table).

Abstract PTU-063 Table

Treatment Group	Improvement in Total JSEQ > 2 at Wk6	Improvement in Total JSEQ > 3 at Wk6
PBO ($n = 130$)	26.2%	18.5%
UST combined ($n = 390$)	34.6% ($p = 0.084$)	27.2% ($p = 0.048$)
Absolute difference between UST and PBO	+8.5% for UST	+8.7% for UST