measured by multicolour flow cytometry. DC were identified as an HLA DR+, lineage- (CD3-,CD14-,CD16-,CD19-,CD34-) population. Expression of TLR 2, 4 and 5, β 7 and CCR 9, and CD40 were measured by multicolour flow cytometry. Cytokines were assessed by multiplex ELISA of biopsy supernatants. The t-test was used in statistical analysis.

Results There was a tendency for increased expression of claudin 2 (18.6% $\pm$ 11.4% v 39.6% $\pm$ 13.4%, $p = 0.3$). Lower levels in lamina propria DC expression of TLR4 (45.8% $\pm$ 6.5% v 33.6% $\pm$ 6.9%) and TLR 5 (35.5% $\pm$ 12.2% v 23.3% $\pm$ 11.5%) as well as β 7 expression (39.9% $\pm$ 7.6% v 31.9% $\pm$ 4.5%) were not statistically significant. There were no changes in the levels of IL2, 4, 6, 10, TNF, IFN or IL17 in the supernatant of mucosal biopsies before or 4 weeks after FMT. However, a rise in IL10 (9.1pg/ml $\pm$ 1.2 v 12.5pg/ml $\pm$ 2.9, $p = 0.2$) was noted following FMT.

Conclusion There were no significant alterations in epithelial tight junction expression or immunological factors studied following FMT. In chronic refractory pouchitis, faecal transplantation may not be effective in altering the aberrant immunological response.

Disclosure of Interest None Declared

OC-094 TGF BETA1 MEDIATED EMT IN CACO2BBE GUT CELLS

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Introduction Crohn's Disease is a chronic autoimmune condition characterised by abdominal pain and diarrhoea. 80% of patients will require surgery and half of these will be as a result of stricture formation. Strictures occur as a result of mesenchymal cell proliferation and deposition of extracellular matrix.

Epithelial-mesenchymal transition (EMT) is a novel mechanism theorised to contribute to gut fibrosis and is a potential target to prevent stricture formation. EMT has been noted in vivo and in animal gut models. However, it has been previously shown that CaCo2 cells are non-responsive to TGF β 1, the principle mediator of EMT. EMT has not been investigated in the CaCo2 BBE cells.

Aims

1. To determine the cell receptor and signalling phenotype of CaCo2 BBE cells
2. To establish EMT in CaCo2 BBE cells

Methods Cell culture

-CaCo2 BBE cells were grown in DMEM and 10% FBS on plastic wells to 100% confluency and allowed to differentiate.

CaCo2 BBE cell phenotype

-Western blotting and immunofluorescence was performed to according to manufacturer protocols to analyse the phenotype of CaCo2 BBE Cells.

TGF-beta mediated EMT

-Cells were exposed to a 1 hour and 4 day treatment with TGF beta.

Results Cell phenotype

Zo1 and E. Cadherin were expressed on the cell membrane. Alpha-SMA was expressed in the cell nuclei.

Intracellularly, vimentin was not expressed. E. Cadherin and zo1 were constitutively expressed.

Cell Signalling

In response to a 1 hour treatment with TGF beta 0.8ng/ml, 2.5ng/ml, 7.5ng/ml, an increase in p-SMAD2 was noted.

Response to TGF-beta

Following a 4 day treatment with TGF beta (2.5ng/ml), no change in expression of alpha-SMA, E.cadherin, Vimentin was observed by Western Blot or Immunofluorescence.

Conclusion EMT has been theorised to play a central role in stricture formation in Crohn's disease. However, this mechanism in human gut cells has only demonstrated by one author.

This project has demonstrated that whilst CaCo2 BBE cells are able to respond to TGF β by increased phosphorylation of SMAD2, we were not able to definitively demonstrate EMT.

Disclosure of Interest None Declared

Poster presentation I

Education and training

PTU-001 REFEEDING SYNDROME: IS OUR KNOWLEDGE DEFICIENT?

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Introduction The 2006 NICE guidelines on "Nutrition support in adults" recommend screening and identification of patients at risk of refeeding syndrome (RS). Despite the implementation of local hospital policies, RS still occurs. This may, in part, be due to a lack of awareness amongst clinicians responsible for at risk patients. We aimed to assess the knowledge and awareness of RS amongst medical doctors in our Trust.

Methods We conducted a questionnaire survey of doctors' practices between April and August 2008. In total 68 doctors, working in medical specialities, from FY1 to Consultants, were surveyed.

Results The overall response rate was 40 (59%). Only 10% were unaware of RS (all FY doctors). However, only 35% were aware of the importance of correcting electrolyte imbalance when commencing enteral feeding. 30% would not monitor electrolytes daily with 25% of the respondents unaware of the important electrolytes to monitor. Although 90% of respondents recognised thiamine as important supplementation, only 20% indicated they would prescribe this to all at risk patients. Only 58% stated they would provide Vitamin B Co-strong and only 63% multivitamins or trace element supplements.

Conclusion RS is potentially fatal. It is essential that clinicians are aware and able to identify at risk patients. This survey highlights that, although many clinicians are familiar with RS and its effects, there is a lack of awareness regarding the NICE guidelines and practice aimed at its prevention in those patients at high risk. Most

Abstract PTU-001 Table

	Grade				
	Consultants	Registrars	Specialist Trainees	Foundation Year Doctors	Total Number (%)
Number involved in the medical rota	15	10	15	28	68
Response Rate (%)	7 (46)	5 (50)	10 (67)	18 (64)	40 (59)
aware of RS (%)	7 (100)	5 (100)	10 (100)	16 (80)	36 (90)
correct any electrolyte abnormalities alongside enteral feeding (%)	2 (29)	1 (20)	8 (80)	3 (17)	14 (35)
prescribe thiamine (%)	0	1 (20)	4 (40)	3 (17)	8 (20)
prescribe Vitamin B Compound (%) Multivitamins (%)	2 (29) 6 (86)	2 (40) 2 (40)	6 (60) 4 (40)	13 (72) 13 (72)	23 (58) 25 (63)