the patients with UC and 22.8% with CD were in remission. No significant HRQoL differences were found between UC and CD patients. But, there was a tendency of the CD patients to have higher IBDQ scores and better emotional functioning. ANOVA analysis identified disease activity and symptom's to explain variations in HRQoL. No significant impact found for sex, educational level, employment and marital status. In contrast, young age (20–40 years) in the CD group had negative impact on their social functioning.

Conclusion HRQoL did not differ significantly between patients with CD and UC But, there was a tendency of the CD patients to score higher in the IBDQ compared to the UC group which can be justified by the beneficial effect of biologic agents in the management of CD. Young age in CD patients had negative impact on their social functioning which indicates the need for developing supportive networks similar to those of Northern Europe in the South. Finally, disease activity and symptom's severity were the only factors that affect HRQoL in our population.

Competing interests None declared.

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PTU-100 DEVELOPING SWANSEA INFLAMMATORY BOWEL DISEASE CLINICAL SEVERITY INDEX (SICSI)

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Introduction To assess IBD activity, many severity scales have been developed. Yet, most of them were not properly validated and did not go through robust methodology. Using different scoring systems makes it difficult to compare different trials especially when the end points are different. Because new therapies for IBD are rapidly emerging, there is a need to optimise and standardise methodology for assessing of disease activity in clinical trials. With the nationwide initiative to establish an IBD registry, a valid and easy to use activity measurement tool is needed. We believe that having a single disease activity index that is suitable for all types and presentations of IBD will make it very useful to monitor patients and assess their response to treatment.

Methods Literature search was conducted using MEDLINE and Google scholar database from January 1947 to 2011 to identify the clinical severity indeces commonly used in clinical trails. Seventeen indeces were identified for both Ulcerative coltis and Crohn's disease. We followed a clini-metric approach to develop the simple IBD clinical severity index. Common items between Ulcerative coltis and Crohn's disease were chosen. Few items were added to cover disease specific domains. The new index was examined by gastroenterologists and methodologists in Swansea University to ensure good face and content validity. The index was tested on 50 patients with different presentations of inflammatory bowel disease. Harvey Bradshaw index and Simple clinical colitis index were used for construct validity. Responsivness was checked by repeating the test within 2-week period.

Results The new index, simple IBD clinical severity index, showed good face and content validity. It covers all presentations of IBD including Crohn's disease, ulcerative coltis and perianal disease. It has good reliability and construct validity. It is easy to use in daily practice.

Conclusion Simple IBD clinical severity index is a new tool to assess the clinical activity of IBD. It is valid, reliable, user friendly and non-invasive index. Further studies are required to check how it performs on a wider range of patients.

Competing interests None declared.

PTU-101 DRUGS USED IN THE TREATMENT OF FISTULAE IN CROHN'S DISEASE PRESERVE MESENCHYMAL STEM CELL SURVIVAL

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Introduction Mesenchymal stem cells (MSCs) may enhance tissue healing in fistulae of Crohn's disease, owing to their multilineage differentiation and immunosuppressive capacity. They are currently under investigation in clinical trials in patients with fistulae, whether cryptoglandular in origin or associated with Crohn's disease. Little is known about the interaction of MSCs with drugs used in the treatment of fistulae in Crohn's disease. We demonstrate here that on daily exposure to antibiotics commonly used in the management of fistulae (ciprofloxacin and metronidazole), as well as anti-TNFα (infliximab), mesenchymal stem cell retain their proliferation and differentiation capacity.

Methods Cultured human bone marrow derived MSCs were plated at a density of 5×10^4 cells per square centimeter in 24 well plates and allowed to adhere overnight. Cells were exposed to a range of daily doses of ciprofloxacin, metronidazole (0.1 μg/ml–30 μg/ml) and infliximab (1 μg/ml–500 μg/ml) for a 6-week period. MSC morphology was assessed daily and differentiation capacity into adipocyte, osteocyte and chondrocyte lineages was studied after exposure to the drugs. MSC survival was assessed at 6 weeks using Annexin-V Apodetect assay followed by FACS analysis. Cell survival was expressed as percentages of cells that were negative for Annexin-V and propidium iodide staining. Analyses were performed using the SPSS statistical package (V. 19.0).

Results MSCs exposed to a range of concentrations of ciprofloxacin, metronidazole and infliximab daily, consistently displayed a normal morphology as assessed by light microscopy. Following exposure of these drugs, differentiation into adipocyte, osteocyte and chondrocyte lineages was conserved. In the absence of drugs, mean survival (±SD) of MSCs was 81.8 ±8.6%. In the presence of ciprofloxacin, mean survival of MSCs was generally increased compared to control cells, significantly so at the highest concentration of 30 μg/ml: 90.1% ($p<0.05$). By contrast, with metronidazole and infliximab there was no suggestion of a change in survival level, when compared to control cells at any of the concentrations used.

Conclusion This study demonstrates that, in vitro, morphological characteristics as well as the proliferation and differentiation capacity of MSCs is preserved in the presence of ciprofloxacin, metronidazole and infliximab. These findings are important in the consideration of the combination of MSCs with antibiotics and anti-TNFα therapy and will inform subsequent studies to optimise drug and cell delivery.

Competing interests None declared.

PTU-102 RE-TREATMENT WITH INFLIXIMAB AFTER A PROLONGED DRUG HOLIDAY IN PATIENTS WITH CROHN'S DISEASE

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Introduction Infliximab (IFX) is a chimeric monoclonal antibody effective for inducing and maintaining remission in Crohn's disease.