that required immediate Consultant review after the scan. 9 patients (17%) required further imaging with CT/MR during the course of their follow up. 

Conclusions Our experience demonstrates that using a combined multidisciplinary clinical-radiological approach with Ultrasound as the primary imaging modality in IBD offers a number of advantages. These include rapid access and flexibility of imaging appointments, minimal patient preparation and instantaneous availability of results allowing immediate feedback and patient counselling. It provides the opportunity for urgent treatment changes and triage of follow up appointment scheduling. Wider adoption of Ultrasound in IBD has the potential to offer significant improvement in speed of diagnosis and patient management.

PWE-021 LOCAL EXPERIENCE OF VSL#3 USE IN POUCHITIS


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Introduction Pouchitis can affect up to 50% of patients following ileal pouch-anal anastomosis (IPAA). Broad spectrum antibiotics are the mainstay of treatment. In 2003 a randomised study of 36 patients showed remission rates of 85% at 1 year with the probiotic VSL#3. In 2003 a US study of 31 patients in clinical practice failed to replicate these results. A Cochrane review found low quality evidence to support the use of VSL#3 in maintaining remission for chronic pouchitis.

We retrospectively evaluated the use of VSL#3 in our teaching hospital, to see if the efficacy demonstrated in the earlier study could be replicated.

Methods We interrogated our surgical database for patients undergoing IPAA between 2003 and 2014. Paper and electronic records were reviewed for details of pouchitis episodes, their investigation and subsequent management. Diagnosis was classified as probable with clinical evaluation only, or definitive based on histological confirmation. Results were tabulated, analysed non-parametrically and presented as medians and interquartile ranges.

Results Pouchitis was diagnosed in 27% of IPAA patients. This cohort had an average age of 48 years and a female preponderance of 1.2:1. The median duration to first episode was 43 months (34–73). The diagnosis was probable in 29% and definitive in 71% of patients. Antibiotics (metronidazole in 100%, ciprofloxacin in 13%) were prescribed in 66.7% of patients.

14 patients (58%) were commenced on VSL#3 following their pouchitis (figure 1). Of those with confirmed recurrent pouchitis, two thirds remain on VSL#3 but use repeated antibiotic courses to settle flares. The median duration of follow up was 92.5 months (48–75).

Conclusions This study evaluated the use of VSL#3 over a longer follow up than those published previously. VSL#3 was efficacious in only 22% of the cohort. Accepting the limitations of this small study, the data suggests VSL#3 has little effect in maintaining remission in pouchitis post IPAA. These results correlate with the earlier US study where 19% of patients demonstrated efficacy at 8 months. Larger studies are recommended to review the benefits of VSL#3 in this cohort, with specific reference to degrees of severity and numbers of previous episodes of pouchitis.

REFERENCES

PWE-022 GUT-HOMING TH17 CELLS ARE SELECTIVELY TARGETED BY VEDOLIZUMAB AND MAY PREDICT CLINICAL RESPONSE IN IBD


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Introduction Trafficking of inflammatory lymphocytes to the gut plays a central role in IBD pathogenesis. We analysed the profile of circulating gut homing effector memory T cell subsets in IBD patients. We also evaluated the impact of treatment with Vedolizumab, a monoclonal antibody that binds to integrin α4β7 (B7) and prevents binding to its ligand MadCAM-1, thereby preventing lymphocyte migration to the gut.

Methods Using multi parametric flow cytometry, we analysed the gut homing (B7+) effector T-cells (CD3+CD4+CD45RO+CD45RA-CCR7-) including different functional lineages: Th1 (CXCR3 CCR6); Th2 (CXCR3 CCR6 CCR4); Th17 (CXCR3 CCR6) and Th1/17 (CXCR3 CCR6) from peripheral blood (PB) of healthy controls (HC, n=42) and IBD (n=34) patients, including a prospective analysis of new starters of vedolizumab. Peripheral blood was taken from patients before their first dose of vedolizumab and at each subsequent infusion.

Results Compared to HC, the proportion of Th1 cells within the gut homing compartment was significantly decreased in PB of IBD patients (median HC 27.3% vs IBD 44%, p<0.0006).

In contrast, the proportion of Th17 cells within the gut homing compartment was significantly increased (HC 12% vs IBD 19%, p<0.003). This difference was most striking in ulcerative colitis. There was no significance difference in Th1/17 or Th2 cells in IBD vs HC.

In the longitudinal analysis, there was minimal impact on gut homing Th1 cells in vedolizumab treated patients (comparison between baseline and week 8), however, the gut homing Th17 compartment increased over the same time period (from 19.3% at baseline to 29.7% at week 8). The proportion of gut homing Th17 was significantly higher in vedolizumab treated patients at week 8 in comparison to infliximab (n=3).

Abstract PWE-021 Figure 1 Outcomes of VSL#3 use after first episode of pouchitis

- No evidence of further pouchitis
- Clinical diagnosis recurrent pouchitis
- Histologically confirmed recurrent pouchitis
- VSL#3 discontinued
treated IBD patients (37.3% vs 18.3%, p<0.02). There was no change in the proportion of Th1 cells expressing β7 in these groups. Intriguingly, preliminary data indicated that clinical response to vedolizumab (30% fall in HBI or SCCAI at week 8) was associated with a significantly higher median number of Th17 cells expressing β7 compared to non-responders (responders: 46.8% vs non-responders: 29.7%, p<0.04).

Conclusions IBD is characterised by an expansion of circulating gut homing Th17 cells, which is yet further increased following institution of vedolizumab therapy. The magnitude of change could also differentiate between responders and non-responders to treatment, raising the possibility that this test could be used as an early warning biomarker to aid decision making in clinical practice.

PWE-023 TSTT (TRIAGE TO STRAIGHT TO TEST) IMPROVES EARLY DIAGNOSIS OF INFLAMMATORY BOWEL DISEASE


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Introduction It is well know that there is a considerable delay in establishing diagnosis of inflammatory bowel disease, in case of Crohn’s disease it about 4–9 months and in case of Ulcerative is about 4 months. Barts health NHS trust is one of the pioneer in establishing STT ('straight to test') service to reduce the wait until a definitive diagnostic test in patients with LGI symptoms. The aim of the study to look at whether this STT service improves early diagnosis of inflammatory bowel disease.

Methods In STT service, routine referrals are vetted and prioritised by specialist colorectal nurses using information from the GP referral letter and patient-reported history during telephone assessment. However, it can be expedite to investigate within 2 weeks due to the onset and severity of their symptoms, particularly patients with symptoms suggestive of inflammatory bowel disease (IBD) including raised faecal calprotectin. Patients >150

Results 1531 patients have been triaged since July 2013 with 813 (53%) female 718 (47%) male respectively. The mean age of the patients is 51 years (range 16–94). Based on telephone triage, 36% were triaged to colonoscopy, 13% had flexible sigmoidoscopy. Only 12.5% of t STT were upgraded to 2 weeks wait. In total, 355 (23.2%) had any pathology encountered. Out of all pathology, 101 (28.5%) of these found to have new diagnosis of IBD. The mean age of these patients is 42 years (range 85–17) and the average waiting time on the STT pathway is only 17 days. Of the remaining 74% of non-upgraded patients (excluding 6% DNA), 25% had pathology of which 10% had newly diagnosed IBD with a mean age of 49 range 85–34 years and waited an average time on the STT pathway of only 17 days. There is a significant difference in between in picking up pathology between upgraded triage and traditional 18 weeks pathways 17 days vs. 32 days (p<0.001).

Conclusion These data suggest that there is significant improvement in diagnosing inflammatory bowel disease early through STT pathways. It appeared to be significantly more early diagnosis can be achieved if triage can be upgraded after telephonic discussion with the triage nurse.

REFERENCE

PWE-024 EFFECTIVENESS OF ANTI-INFLAMMATORY THERAPY IN IMMUNE CHECKPOINT INHIBITOR-INDUCED DIARRHOEA/COLITIS

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Introduction Immune checkpoint inhibitors (ICPI), including monoclonal antibodies targeting CTLA-4 (e.g. ipilimumab) and PD-1 (e.g. nivolumab) have transformed the treatment landscape for cancer. However, their success is hampered by the high incidence of immune-mediated toxicity. ICPI-induced diarrhoea/colitis, resembling some aspects of IBD, occurs in up to 46% of patients and is the most common cause of ICPI discontinuation and death. Presently, treatment of ICPI-induced colitis is ad hoc, but typically involves systemic steroids, with biologics (most commonly anti-TNF) used as rescue therapy. ICPI use is anticipated to increase substantially in coming years, and expert gastroenterology input, and development of evidence-based treatment algorithms is now urgently needed. Our aim was to conduct a systematic review on the effectiveness of anti-inflammatory therapy in the management of ICPI-induced diarrhoea/colitis.

Methods Relevant databases including Medline (PubMed and OVID), EMBASE, Web of Science and Cochrane were searched up to September 2017. Inclusion criteria included adult cancer patients treated with at least one dose of an ICPI, and reported outcome data following anti-inflammatory drug management of diarrhoea. Two independent reviewers assessed eligibility of studies.

Results After reviewing 1838 studies, 26 met the inclusion criteria (15 original articles, 11 abstracts), of which 17 (65%) were retrospective studies. A total of 983 patients had diarrhoea and/or colitis. 16 studies reported on anti-CTLA-4 therapy (ipilimumab or tremelimumab), 4 on anti PD-1, and 6 on both (either anti-CTLA-4 or anti-PD1) or combination therapy. 558 (57%) patients were treated with corticosteroids, with clinical response reported in 333 (62%). However, reporting of the corticosteroid dose, type and regimen used was inconsistent.

297 (30%) patients with steroid refractory disease received infliximab with good response rates (86%)- although response rates were only reported for 188 patients.

A single case series reported vedolizumab to be effective in the management of 6 out of 7 steroid refractory patients.

Conclusions ICPI-induced diarrhoea/colitis is a significant complication of cancer immunotherapy and engagement with specialist gastroenterology services are now urgently needed to improve outcomes. Systematic review of therapeutic experience in this setting indicates that about two-thirds of patients respond to high-dose steroids, and rescue therapy with biologics captures response in most patients. Given the predicted expansion in use of ICPI in cancer, better quality clinical data are needed to inform standardised treatment protocols.