Introduction Faecal incontinence (FI) is a common and distressing problem with diverse aetiology and a significant economic burden^{1,2}. First-line therapy includes dietary modification, medication and bio-feedback. Surgical options include sphincteroplasty, artificial bowel sphincter insertion, sacral nerve stimulation and stoma formation³.

Recently, magnetic sphincter augmentation has been used successfully in gastro-oesophageal reflux disease⁴. A magnetic anal sphincter (MAS) (Torax Medical, Mn, USA) have been developed to reinforce an incompetent anal sphincter in FI. The MAS device consists of magnetic cores hermetically sealed within a series of titanium beads inter-linked on independent titanium wires, forming a ring that rests around the external anal sphincter. The force required to separate the beads is approximately 100g, equivalent to normal defaecatory force⁵.

Methods Three multiparous females (47–54 years) with severe FI had MAS devices implanted under general anaesthesia. Two had failed neuromodulation, one had a failed sphincteroplasty and one incontinence after neo-chemoradiotherapy and colo-anal anastomosis for cancer. A curved, anterior perineal incision allowed creation of an extrasphincteric circumanal tunnel. Under fluoroscopic guidance and with fastidious antiseptic technique, the appropriate size MAS was inserted. All were discharged the same day.

Results Two patients with obstetric aetiologies reported significant improvement in continence at 6 weeks (St. Mark's Score 19 to 4 and 14 to 5 (24 = max worst score). The third patient, with anterior resection syndrome, developed a recalcitrant wound infection with subsequent device extrusion and explantation.

Conclusion MAS insertion is a novel, promising technique for management of FI. Further study is required prior to making definitive conclusions.

Disclosure of Interest None Declared.

REFERENCES

1. Mellgren A. Fecal Incontinence. *Surgical Clinics of North America* 2010; 90:185–194.
2. Wald A. Fecal Incontinence in Adults. *New England Journal of Medicine* 2007; 356:1648–55.
3. Lehur PA, Mc Nevin S, Buntzen S, Mellgren AF, Laurberg S, Madoff RD. Magnetic Anal Sphincter Augmentation for the Treatment of Fecal Incontinence: A Preliminary Report From a Feasibility Study. *Diseases of the Colon and Rectum* 2010; 53:1604–1610.
4. Use of a magnetic sphincter for the treatment of GERD: a feasibility study. *Gastrointestinal Endoscopy* 2008; 67(2):287–294.
5. Bharucha AE, Croak AJ, Gebhart JB, et al. Comparison of recto-anal axial forces in health and functional defecatory disorders. *American Journal of Physiology – Gastrointestinal and Liver Physiology* 2006; 290:1164–1169.

PTH-022 RECTAL IRRIGATION IN FUNCTIONAL BOWEL SYMPTOMS: PROSPECTIVE AUDIT OF PATIENTS ATTENDING A NOVEL TERTIARY SERVICE (THE HEALTHY BOWEL CLINIC)

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Introduction Rectal irrigation was developed to treat patients with neurogenic bowel dysfunction. More recently its application in the management of functional bowel disorders has increased but published outcome data are scarce. Our pelvic floor unit offers a novel tertiary referral service (the Healthy Bowel Clinic) and has employed rectal irrigation within a Bowel Care Pathway for the last 6 years to treat a variety of functional bowel symptoms, including constipation, faecal incontinence and obstructive defecation syndromes (ODS). As part of our service evaluation we aimed to audit patient-reported outcome using a postal questionnaire survey.

Methods We identified a cohort of 101 consecutive patients (85 female; 16 male) who had commenced rectal irrigation and attended the service for at least 12 weeks (mean: 55 weeks; range 12–70). The

cohort included 45 with predominant constipation, 27 with faecal incontinence and 29 with ODS. A cross-sectional postal survey was undertaken using a questionnaire which first asked whether irrigation was continuing at this time or not. Patients reporting continued use were asked to record it's frequency, water volume and a pre- and post-treatment symptom score (VAS Scale:0–10). Those reporting cessation of treatment were asked to indicate their reasons for stopping. Reasons for discontinuation of irrigation were recorded.

Results 68 of 101 patients (67.3%) reported continuing use of rectal irrigation. Of the patients still irrigating, 24 were in the constipated group, 18 were in the faecal incontinence group and 26 were in the ODS group. Their mean (sd) pre-treatment symptom score was 9.1 (1.5), confirming a high symptom burden among patients selected for treatment, and the post-treatment rating of current symptoms was significantly improved at 4.2 (2.3) ($p < 0.001$). The mean irrigation volume was ~800 mls (range: 150–2000) and 41 patients (60%) reported daily use. Of 33 patients who stopped using irrigation, 11 (33.3%) cited a failure to address symptoms as the reason for cessation (Constipation: 21; Faecal Incontinence: 9; ODS: 3).

Conclusion The results show that rectal irrigation is a viable treatment option for patients presenting with a range of functional bowel symptoms. Efficacy was achieved across a variety of sub-groups. It was acceptable and well-tolerated as indicated by frequent and prolonged use in many patients. Further research is needed to identify clinical criteria to guide patient selection and predictors of success.

Disclosure of Interest None Declared.

PTH-023 SCREEN DETECTED COLORECTAL CANCER: BENEFITS AND CHALLENGES OF CATCHING THEM YOUNG

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Introduction The bowel cancer screening programme (BCSP) is known to detect majority of colorectal cancer (CRC) at an earlier stage. We aimed at determining the outcome of screen detected CRC (SDCRC).

Methods 165 patients diagnosed with CRC through BCSP were compared to a control group, which included 179 age matched patients diagnosed with CRC before the implementation of BCSP. Survival analysis was performed at a median follow up of 36 months.

Results The SDCRC and control groups were similar with respect to gender distribution and vascular invasion (VI). SDCRC were more likely to be detected at an earlier Modified Dukes' stage ($p < 0.001$). The stage distribution of SDCRC was similar to the national pilot (1) except for a higher percentage with metastatic disease (9% v 1%). During the follow up of SDCRC, 23 patients developed recurrent CRC and 19 patients died. While the overall survival (OS) was significantly better in SDCRC ($p < 0.001$), the recurrence free survival (RFS) in SDCRC was similar to the control group ($p = 0.798$). Left sided tumours ($p = 0.022$, HR-5.3) and VI ($p = 0.004$, HR-8.3) had an independent adverse influence on RFS in SDCRC. VI had a significant influence on RFS in both polyp ($p = 0.006$) and non-polyp cancers ($p = 0.012$) among SDCRC.

Conclusion While the OS was significantly better in the SDCRC, there was no significant difference in the RFS between the two groups. While the benefits of screening are clear, we need to be aware of the challenge posed by the expanding group of aggressive early CRC. Longer follow up is necessary to carefully quantify the survival and economic benefits achieved through NHS BCSP.

Disclosure of Interest None Declared.

REFERENCE

1. Results of the first round of a demonstration pilot of screening for colorectal cancer in the United Kingdom. *BMJ* 2004; **329**:133.