PWE-119

MR ENTEROGRAPHY IN THE INVESTIGATION OF ABDOMINAL PAIN

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J Makanyanga,[1,*] A Srivastava,[1] J Gan,[1] S Medapati Dhana,[1] P Khana,[1] V Muthuppalaniappan,[1] S Jain,[2] M McStay[1] *[1]Department of Gastroenterology, Southend University Hospital, Southend, UK; [2]Department of Radiology, Southend University Hospital, Southend, UK*

Introduction Magnetic Resonance Enterography (MRE) has an established role in the management of patients with small bowel Crohn's disease[1] and has the advantages of diagnosing extra-enteric lesions which may be clinically significant[2]

and being free from the risks of radiation exposure. There is little published data on the use of MRE in the investigation of patients with chronic abdominal pain.

Methods A retrospective review of case notes was conducted of 167 patients who underwent MRE at Southend University Hospital for abdominal pain between April 2008 and August 2010 and did not have a pre-existing diagnosis of inflammatory bowel disease (IBD) by colonoscopy or capsule endoscopy.

MRE was performed using a 1.5 Tesla MR scanner following a minimum 6 h fast and bowel preparation with Kleen prep an hour prior to the scan. Two T2-weighted sequences single-shot fast spin-echo (SSFSE) and fast imaging employing steady state acquisition (FIESTA) were performed in the axial and coronal planes.

Results 51 Male and 106 Female patients had MRE for abdominal pain during the study period. The mean age was 42.2 years (range 14–85 years).

34.7% (58/167) of cases had a contrast abdominal CT scan prior to the MRE. MRE found clinically significant abnormalities in 16.8% (28/167). 13 of these patients had a prior CT scan and in 8 cases MRE was used to clarify CT findings.

The findings were as follows:

- 12 SB Crohn's (5 CT suggestive)
- 1 adhesional SB Obstruction (1 CT normal)
- 1 radiation induced small bowel stricture
- 1 GIST – leiomyoma at resection (normal CT and gastroscopy)
- 3 SB carcinoid – confirmed at resection (1 capsule endoscopy abnormal, 1 CT suggestive)
- 1 jejunal tumour – adenocarcinoma at resection (normal CT)
- 1 duodenal mass with intussusception – villous adenoma at resection (CT suggestive)
- 1 left adrenal mass
- 1 ovarian endometrioma
- 1 renal cell carcinoma – confirmed at resection
- 1 peritoneal metastases – metastatic breast carcinoma at biopsy (CT colonic thickening and free fluid, normal colonoscopy)
- 1 Meckel's diverticulum
- 1 intussusception
- 1 splenic mass – granuloma at resection (CT abnormal)
- 1 reactive lymph nodes with jejunal thickening (CT abnormal)

Conclusion MRE is a useful investigation for chronic abdominal pain in patients without a prior diagnosis of IBD. It yields clinically significant enteric and extra-enteric findings and carries no risk of radiation exposure.

Competing interests None.

Keywords chronic abdominal pain, Crohn's disease, MR Enterography.

REFERENCES

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