## 35 IS AVAILABILITY OF MR ENTEROGRAPHY (MRE) REDUCING AVOIDABLE USE OF IONISING RADIATION IN DIAGNOSTIC IMAGING FOR CROHN'S DISEASE?

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**Introduction** MRE has been increasingly adopted as the imaging modality of choice for patients with small bowel Crohn's disease, replacing barium studies and CT. MRE has similar sensitivity to CT for detection of small bowel inflammatory changes but has the advantage of no exposure to ionising radiation.

**Aims/Background** We aimed to evaluate whether the availability of MRE has diminished or eliminated avoidable radiation exposure related to diagnostic imaging in this patient group.

**Method** Retrospective analysis of a database of 3000 patients with IBD in a large tertiary referral hospital was performed. All patients diagnosed with Crohn's disease during the period of 01-01-2009 until 15-10-2012 were identified. A review was performed of all abdominal imaging done at the study centre–MRE, abdominal CT and barium small bowel studies.

**Results** 122 patients had a new diagnosis of Crohn's disease. 58 (47.5%) were female. Median age at diagnosis was 28 years (IQR 23–40).

A total of 62 MRE studies were performed in 52 patients (42.6%).

26 patients (21%) had a barium small bowel examination.

A total of 83 abdominal CT studies were performed in 52 patients (42.6%). 35 (42%) of these were performed as an emergency investigation. 18 patients had 2 or more abdominal CT studies performed (range 2–6).

55 patients (45%) had an abdominal CT or barium examination performed in a non-emergency setting.

**Conclusion** This study shows that there is still significant use of ionising radiation, sometimes performed repeatedly, in a non-emergency setting. 45% of this young patient cohort received avoidable radiation exposure related to diagnostic imaging.

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