

## AB131. 121. Is abdominal CT being utilized optimally in acute non-traumatic patient management

Lianne Pickett<sup>1</sup>, Jennifer Mannion<sup>1</sup>, Alice Clarke<sup>2</sup>, Dermot Hehir<sup>1</sup>, Sean Johnston<sup>1</sup>

<sup>1</sup>General Surgery Department, Midlands Regional Hospital Tullamore, Tullamore, Co. Offaly, Ireland; <sup>2</sup>Graduate Entry Medical School, University of Limerick, Castletroy, Limerick, Ireland

**Background:** CT utilization for the expedition of patient care has increased exponentially. This study aimed to evaluate the use of abdominal CT and to assess its clinical impact.

**Methods:** A retrospective analysis was conducted of all inpatient CT reports involving the abdomen over a 1 month period. CT for multiple trauma, oncological restaging and CT angiogram were excluded. Reports were identified using National Integrated Medical Imaging System (NIMIS) and analysed in conjunction with patient records with respect to the following outcomes: (I) new diagnosis; (II) discharge within 24 hours; and (III) significant change to clinical management. The iRefer guidelines were also consulted.

**Results:** A total of 155 inpatient CT scans were carried

out over a 1 month period. Among them, 113 scans and patient records were analysed and 74% adhered to iRefer guidelines. Mean age was 61.21 years (52% female; 25% of child bearing age). The 59% resulted in a new diagnosis. CT diagnosis was consistent with the clinical question in 91% of cases and if a clinical question was formulated on request, this resulted in at least twice the number of new diagnoses than if it was not; 16% resulted in discharge within 24 hrs and 5% impacted clinical management. Thus, 80% were associated with a positive outcome, as defined by this study; 81% of scans were associated with at least 1 incidental finding, 35% of which were deemed clinically significant. The remaining scans either had no clinical impact (7%) or were inconclusive (12%).

**Conclusions:** Our findings suggest that use of abdominal CT has a beneficial impact on patient care and is potentially cost saving. A positive relationship between clinical question on request and the probability of a new CT diagnosis was illustrated. Adherence to iRefer guidelines was moderate and suggests suboptimal utilization. CT imaging is associated with a high rate of non-significant incidental findings and should not replace clinical examination.

**Keywords:** CT abdomen; iRefer; clinical outcomes

doi: 10.21037/map.2019.AB131

**Cite this abstract as:** Pickett L, Mannion J, Clarke A, Hehir D, Johnston S. Is abdominal CT being utilized optimally in acute non-traumatic patient management. *Mesentery Peritoneum* 2019;3:AB131.