



AB151. SOH22ABS121. Inflammatory marker, radiological and histological correlation of appendicectomies

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Background: Whether to leave or resect a macroscopically normal appendix is debated. Normal appendectomy rates (NAR) should be <10%. Serology, imaging and clinical examination all contribute to the decision making process. This audit compares histology outcomes to investigations and outcomes.

Methods: Pre-operative inflammatory markers and imaging reports were collated. Histological diagnosis was compared to pre- and post-operative investigations. Outcomes include NAR and intraabdominal complications.

Results: A total of 200 sequential laparoscopic appendicectomies were identified in Regional Hospital Mullingar (January to October 2021). One hundred and ninety-six, confirmed to be for acute abdominal pain, were included. Ninety-two patients (45.4%) were over 18 years and 94 (48%) were female. One hundred and fifty-four (78.5%) had histological diagnosis of acute appendicitis. Twenty-nine (14.8%) specimens were otherwise pathologically abnormal. Approximately seven percent of samples were histologically normal (NAR): 71.4% under 18 years old and 59.5% female. Only 50.4% of acute appendicitis presented with both an elevated white cell count and C-reactive protein. Ultrasound (US) scanning was used in 36 cases (18.3%) and was 'suggestive' of appendicitis in 5 cases (sensitivity 13%). CT scanning was used in 61 patients (31.1%). One negative appendicectomy was suspected to be appendicitis (Sensitivity 88.9%). Four patients (2%) had post-operative

intraabdominal complications—all had appendicitis.

Conclusions: The diagnosis of acute appendicitis is multifactorial. Inflammatory markers are helpful only as part of an overall clinical assessment. Ultrasound is of questionable value. CT is highly sensitive and specific, but its use in young patients is limited by radiation dose. Normal appearing appendices commonly harbour other pathology. Normal appendicectomy is not associated with serious complications.

Keywords: Appendicitis; appendicectomy; histology; inflammatory markers; radiology

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Footnote

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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