

# AB187. SOH21AS230. Use of diagnostic imaging and post-operative colonoscopy to evaluate elderly patients with acute appendicitis: a 5-year single centre cohort study

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**Background:** Acute appendicitis (AA) is relatively uncommon in patients over the age of 50 and may represent a first presentation of colorectal carcinoma. AA represents approximately 15% of abdominal pain presentations in patients over the age of 50, compared to almost 30% in younger patients. Rates of complicated appendicitis are also higher amongst this cohort. The objectives of this study were two-fold: firstly to evaluate the use and accuracy of pre-operative diagnostic imaging in evaluating patients over the age of 50 with suspected AA. Secondly, to evaluate the detection rate of colorectal cancer on colonoscopy following diagnosis of AA

**Methods:** All patients over the age of 50 diagnosed with AA at our centre between September 2015 and September 2020 were included for analysis. Clinical data was obtained via retrospective review of patient medical records.

**Results:** Of 106 patients diagnosed with AA, 94 (88.6%) underwent appendectomy. 61 patients (57.5%) underwent a diagnostic CT scan, 25 (23.6%) a diagnostic ultrasound. Twenty-two patients (36%) were found to have complicated appendicitis on CT. CT was associated with an overall diagnostic accuracy of 85.1%, and Ultrasound a diagnostic accuracy of 73.6%. Twenty-four patients (22.6%) were followed up with colonoscopy, 1 patient (4.1%) was diagnosed with a caecal tumour on colonoscopy. The

overall incidence of colorectal carcinoma was 3.7% across the cohort.

**Conclusions:** Appendicitis is often complicated in elderly patients, diagnostic imaging should be undertaken where possible, both to confirm diagnosis and guide appropriate intervention. Rates of colorectal cancer are high amongst this cohort and post-operative colonoscopy is recommended.

**Keywords:** Acute appendicitis (AA); colorectal cancer; colonoscopy; diagnostic imaging; emergency general surgery

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## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*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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