

## AB029. SOH21AS128. Effect of COVID-19 on the treatment of acute appendicitis in a peripheral hospital

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**Background:** The coronavirus-19 (COVID-19) pandemic impacted the provision of emergency surgical services. The modality of treatment of acute appendicitis had to be reconsidered given the risks of operative management, leading to the increase in the number of patients being treated conservatively.

**Methods:** A retrospective cohort study was conducted over the first three months of the COVID-19 outbreak. All patients admitted with acute uncomplicated appendicitis in Midlands Regional Hospital Tullamore were included. Demographic factors, radiological/haematological investigations, antibiotic therapy and success or failure of conservative treatment were recorded. Virtual follow-up was 6–12 weeks post-admission. Comparison to a similar cohort from the same timeframe in 2019 was performed with cost analysis.

**Results:** Twenty-eight patients with acute uncomplicated appendicitis were admitted in 2020. About 39.2% (n=11) underwent successful conservative treatment. About 60.7% (n=17) failed conservative treatment and required surgical intervention. Follow-up of the patients treated conservatively, identified 27.2% (n=3) required re-admission and surgery for recurrent appendicitis. 2019 data highlighted 8% (n=3) patients were treated conservatively. Cost analysis delineated a cost benefit to conservative management.

**Conclusions:** Conservative management of acute uncomplicated appendicitis is viable to minimise risks of

COVID-19 exposure to patients and staff. However, re-attendance with recurrent appendicitis nullifies this risk avoidance and negates any cost benefit of conservative management. While surgical intervention is more expensive, it negates potential for recurrence and may increase patient satisfaction and decrease recurrent admissions. Staff and patient safety is paramount during the COVID-19 pandemic. However, the accepted standard of care that provides definitive management should not be impacted to avoid jeopardising quality of care.

**Keywords:** Appendicitis; SARS-CoV-2; coronavirus-19 (COVID-19); treatment; conservative management; surgical management; antibiotic; appendicectomy

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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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