

# Can histopathological analysis of an appendix be eliminated in a resource-limited area?



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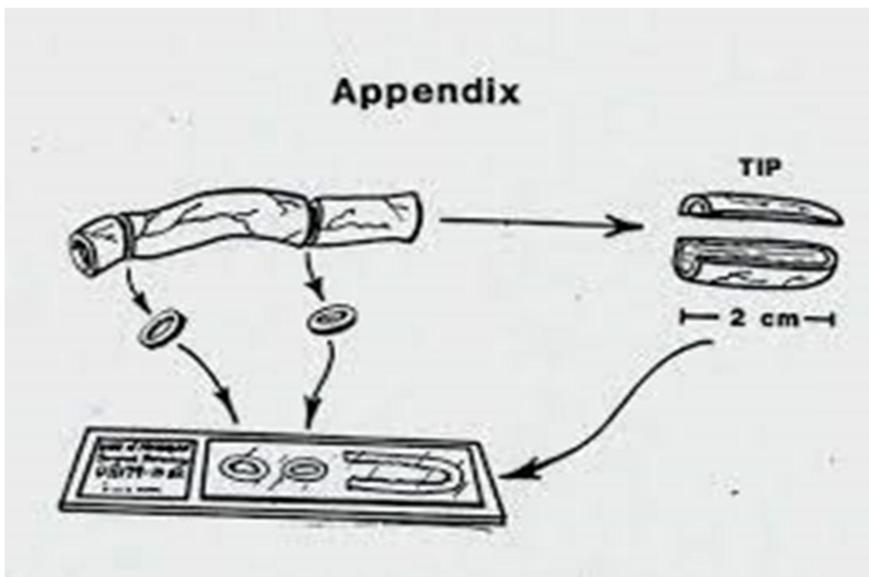
## BACKGROUND

Many studies have reported on the modalities of diagnosis and management of acute appendicitis globally, but few have addressed if there is a need for ongoing histopathological analysis. Many appendicitis specimens demonstrate acute inflammation, perforation, or necrosis on histology, with less than 10% of the appendix showing the probable aetiological agent. There is a worrying increasing trend of appendiceal neoplasms showing an increase in incidence from 5.6% to 12.7% in the adult population but this incidence remains low in the paediatric group at 0.3% (Ranaweera et al, 2019).

## Method

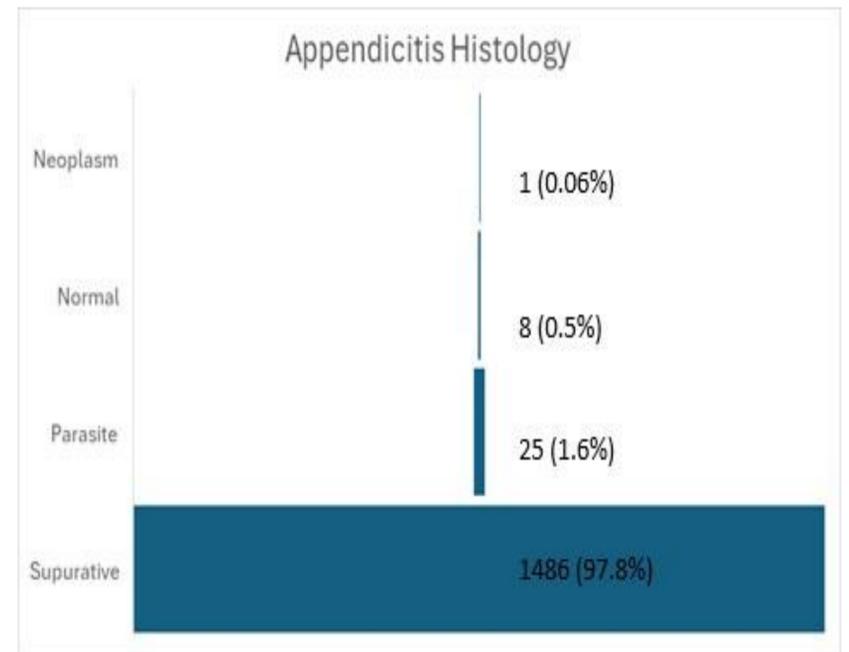
Retrospective cross-sectional study involving all paediatric cases of acute appendicitis managed at the three tertiary centres in the region over a 5 year period. 1520 cases were identified for this study

## Appendix Analysis



One appendix specimen analysis costs R1200 (70 US dollars)

## Results



1520 \* 70 = 105 000 US dollar (R1,82 million)

## CONCLUSION

With 98% of the appendix specimens showing suppurative appendicitis and only 0.06% revealing malignancy, a recommendation to not submit further specimens in the paediatric population holds with an estimated saving of 105 000 USD

## REFERENCES

Ranaweera, C., Brar, A., Somers, G., Sheikh, F. (2019) 'Management of pediatric appendiceal carcinoid: A single institution experience from 5000 appendectomies', *Pediatric Surgery International*, 35(12), pp.1427-1430

