

Acute Appendicitis In Identical Twins

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Abstract

Simultaneous cases of appendicitis in identical twins are extremely rare. We report identical twins who presented with similar features of appendicitis within 5 days of each other.

CASE HISTORIES

CASE 1

The first patient was a 14 year old girl from South African origin who presented with a 36 hour history of central abdominal pain which later localised to the right iliac fossa. There was no significant past medical history.

Clinical examination revealed a temperature of 38°C, with local peritonism in the right iliac fossa. Laboratory investigations did not reveal leucocytosis. The patient underwent a routine appendectomy without any complications. The appendix was mildly inflamed, confirmed on histology, in a retrocaecal position. She was later discharged on the second post-operative day.

CASE 2

The identical twin of the first patient presented five days after her sister with a 24 hour history of right iliac fossa pain. Her past medical history was unremarkable.

On examination, she had a temperature of 37.8°C and was tender in the right iliac fossa. Her blood results were also normal without any evidence of leucocytosis. The patient underwent an uncomplicated appendectomy through a Lanz incision. The appendix was inflamed in a retrocaecal position. Histology confirmed the diagnosis. She made an excellent post operative recovery and was discharged on the second post-operative day.

DISCUSSION

Simultaneous cases of acute appendicitis are extremely rare and only five cases have been reported in the literature.^{1,2,3,4,5} Genetic factors have been implicated by some authors. Basta et al. performed a retrospective analysis of the families of 80 patients with acute appendicitis. They showed familial aggregation and polygenic transmission when compared to

similar 'control' families.⁵

All of the twins evaluated in the literature presented in the first or second decade within a day of each other.

Appendicitis was also confirmed on histology. Although the South African twins presented slightly further apart, it is interesting that both were pyrexial and did not show leucocytosis. Furthermore, both had their appendix in the retrocaecal position.

There are not sufficient cases in the literature to conclude whether genetics or coincidence is responsible for this presentation. However, one would imagine that there would be more reported cases of simultaneous appendicitis amongst identical twins given the 1 in 300 chance of twin pregnancy.

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