



- Lee ED, Rosenberg CR, Sixsmith DM, Pang DM, Abularrage J. Does a physician-patient language difference increase the probability of hospital admission? *Acad Emerg Med* 1998; 5(1): 86-89.
- Flores G, Laws MB, Mayo SJ, et al. Errors in medical interpretation and their potential clinical consequences in pediatric encounters. *Pediatrics* 2003; 111(1): 6-14.
- Currie K, Rajendran M, Spink J, Carter M, Anderson J. Consumer health information. What the research is telling us. *Aust Fam Physician* 2001; 30: 1108-1112.

## Duplex appendicitis

I Chamisa, S Nikolov, T Q Bam

**To the Editor:** We report a case of the rare condition of double appendicitis. Appendix anomalies may have grave consequences if overlooked during an operation, or have forensic implications where a second exploratory laparotomy reveals a 'previously removed' vermiform appendix.

A 42-year-old man presented with a 5-day history of central colicky abdominal pain associated with nausea and vomiting. He had had two previous similar attacks in the past year. On examination, he was tachycardic, dehydrated and pyrexial with a raised white cell count. The abdomen was markedly distended and peritonitic with absent bowel sounds. With a presumptive diagnosis of perforated appendicitis with small-bowel obstruction, an exploratory laparotomy was performed. There were multiple dense adhesions between the bowel loops with free pus in the abdomen. The appendix, 3 cm in length, was retrocaecal, acutely inflamed and perforated. Exploration of a further small mass felt through the medial wall of the caecum below the ileocaecal junction revealed a second short appendage, 3 cm in length, arising from the posteromedial wall of the caecum that was also acutely inflamed and perforated. The appendages were excised and microscopic examination of both showed features of acute appendicitis with perforation and fibrinopurulent peritonitis. The patient's convalescence was complicated by wound sepsis.

### Discussion

Duplication of the vermiform appendix, originally described in 1903, is rare with a reported incidence of 0.004%.<sup>1</sup> This condition needs to be distinguished from a solitary diverticulum of the caecum, which is found on the inner side of the ileocaecal angle; on histological examination the wall of the diverticulum does not contain lymphoid tissue.

Duplication of part of the alimentary tract, in particular of the vermiform appendix, is of embryological curiosity

Prince Mshyeni Hospital, Durban  
**I Chamisa**, MRCS, FRCS, FCS (SA)  
**S Nikolov**, MB ChB  
**T Q Bam**, MB ChB

Corresponding author: I Chamisa ([charms@doctors.org.uk](mailto:charms@doctors.org.uk))

and may be associated with other congenital duplications.<sup>1</sup> Histologically the appendix can be distinguished from other intestinal duplications by the presence of a complete and separate inner and outer longitudinal muscle layer and the amount and arrangement of lymphoid tissue. In their classic work *The Vermiform Appendix and its Diseases*<sup>2</sup> Kelly and Hurdon examined 54 human embryos to explain the origin and development of the appendix. The caecum of the 6-week-old embryo had a minute budding resembling a 'beginning appendix'. This small 'transient appendix' had disappeared in the 8-week-old embryo. Wallbridge<sup>3</sup> modified Cave's original classification<sup>4</sup> of duplicated vermiform appendix as follows:

- A: Single caecum with one appendix exhibiting partial duplication.
- B: Single caecum with two obviously separate appendices.
- B1: The two appendices arise on either side of the ileocaecal valve in a 'bird-like' manner.
- B2: In addition to a normal appendix arising from the caecum at the usual site, there is also a second, usually rudimentary, appendix arising from caecum along the lines of the taenia at a varying distance from the first.
- C: Double caecum, each bearing its own appendix and associated with multiple duplication anomalies of the intestinal tract as well as the urinary tract.

In an unusual case reported by Tinkler<sup>5</sup> three separate appendices were found to arise from a single caecum in a child with extrophy of the urinary bladder.

Our case was type B2, the most frequently encountered duplication, thought to represent persistence of the 'transient appendix'. The clinical and medicolegal significance of the type B2 duplication was reported in a case in which a child had an appendicectomy performed twice within a 5-month period.<sup>6</sup>

- Bluett MK, Halter SA, Salhany KE, et al. Duplication of the vermiform appendix mimicking adenocarcinoma of the colon. *Arch Surg* 1987; 122: 817-820.
- Kelly HA, Hurdon E. *Anatomy. The Vermiform Appendix and its Diseases*. Philadelphia: WB Saunders, 1905: 55-74.
- Wallbridge PH. Double appendix. *Br J Surg* 1963; 50: 346-347.
- Cave AJE. Appendix vermiformis duplex. *J Anat* 1936; 70: 283.
- Tinkler IF. Triple appendix vermiformis – a unique case. *Br J Surg* 1968; 55: 79.
- Withdrawal of charge of negligence against surgeon. Editorial. *BMJ* 1932; 1: 504.