

ACUTE APPENDICITIS IN AN INFANT

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Acute appendicitis with perforation in infancy is rare, and the diagnosis of peritonitis at this age difficult. Etherington-Wilson,⁴ writing in 1945, found reports of 16 cases of acute appendicitis in the age-group 0-4 weeks, and he added a case aged 16 days. Gross⁵ reviewed 2,070 cases of appendicitis occurring in infancy and childhood. Of this total only 7 were less than 1 year old, the youngest being 6 months. He states that appendicitis is quite rare in the first year of life and infrequent in the second year and from then on it becomes common.

Creery³ reports the case of an 11-days-old infant who developed appendicitis and died on the 20th day after an appendix abscess had formed. Ch'eng and K'ang² treated a patient aged 3 days expectantly. At post-mortem examination after death at 12 days an acute gangrenous appendix with diffuse peritonitis was found. Gangrenous appendicitis was found by Baker¹ in a 5-days-old infant who had developed symptoms 2 days earlier. A similar fatal case was reported by Meyer,⁶ his patient being premature and dying at the age of 9 days.

Case report:

N.N., a 9-days-old male Bantu infant, was brought to the Edendale non-European Hospital, Pietermaritzburg, by his mother on 20 July 1957. She reported that the infant had appeared indisposed 4 days earlier. As she noticed that the child was constipated, an enema was administered. The amount and nature of the enema fluid could not be ascertained; a hollow cowhorn was used as a combination douche-can and nozzle and the amount of fluid was probably not less than 10 oz. No improvement followed this treatment. Slight abdominal distention appeared and increased progressively, the child vomited occasionally, and his general condition deteriorated.

On examination, the infant was *in extremis*; he was severely

dehydrated and his abdomen tensely distended; he died during the examination.

At necropsy a diffuse purulent peritonitis was present with no attempt at localization. The proximal third of the appendix and

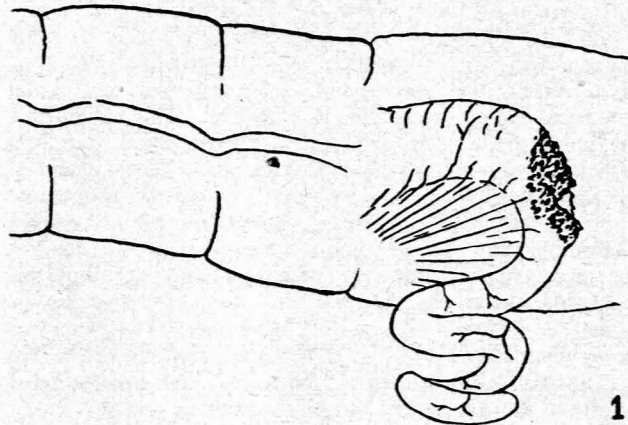


Fig. 1. Caecum and appendix showing the gangrenous patch and perforation in the proximal third of the appendix.

the meso-appendix was swollen and hyperaemic and a gangrenous patch with a central perforation was present on the antimesenteric border. The distal two-thirds, apart from adherent purulent exudate, was normal (Fig. 1). The mucosal surface of the remainder of the intestine was normal.

Discussion

In most of the reported cases of acute appendicitis in infancy, the condition has been fatal. This is due, no doubt, to the difficulty of diagnosing the condition before the onset of complications. This is confirmed by Gross's figures;⁵ of 7 cases less than 1 year old, no less than 6 had a

perforated appendicitis; of 72 cases in the age-group 1-2 years, 65 presented with the same complication. When perforation has occurred, the prognosis is poor.

Peritonitis in the infant will hardly ever be diagnosed if the classical signs of adult peritonitis are looked for. Rigidity and tenderness are unreliable in the infant. Generalized increasing distention is often more in evidence. A tendency to constipation is the rule.

The danger of purgatives in cases of suspected appendicitis is very generally stressed. Uncomplicated constipation often arises as a possibility in the differential diagnosis of these cases and an enema is often then recommended, in the belief that such treatment will bring relief if constipation is the cause of the trouble, and that it will cause no harm if appendicitis really exists.⁵ It would appear that, if prescribed under these circumstances, an enema should only be administered under medical supervision, in order

to ensure its correct use and so that the diagnosis may be reconsidered afterwards and operative treatment proceeded with if a strong suspicion of appendicitis remains.

SUMMARY

A case is reported of death from generalized peritonitis due to perforation of an acute appendicitis in a male infant aged 9 days. This followed administration of an enema.

The difficulty of diagnosis of early peritonitis in the infant is stressed.

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