Ingested Metallic Screw Causing Appendicitis in an Infant—The Metallic ‘Screw Appendicitis’

Sir,

Older Infants may ingest a foreign body (FB) or be fed by siblings or another child. FB appendicitis is very rare and overall incidence is 0.005% to 3 %.^{1,2} Various types of FBs are reported in the appendix,³ however, metallic screw causing appendicitis is extremely rare with only one case reported as ‘Screw-Appendicitis’.⁴

An eleven month male baby presented with 2 day history of irritability, refusal to feed, fever and diarrhea with tenderness and guarding in the right iliac fossa (RIF). Abdominal X-ray (AXR) showed a metallic screw in the RIF (Fig.1). On probing, parents revealed, baby was fed a metallic screw by an older child 4 mo ago. Since then serial AXRs done by a ‘medical quack’ showed mild changes in the position of the screw restricted to RIF. Ultrasonography showed no intussusception and appendix was not visualized. Diagnosis of FB appendicitis was made, but possibility of FB impacted in cecal wall, ileocecal junction, meckel’s diverticulum and rare appendicular or ileocecal tuberculosis was also considered. At surgery, inflamed appendix filled with pus and an impacted metallic ‘screw’ was found. Screw retrieved by appendectomy measured 1.5 cm x 0.3 cm. Appendectomy was done and histopathology confirmed acute appendicitis without any evidence of tuberculosis.

Appendicitis is very rare during infancy, nevertheless can occur with increased complications due to delayed diagnosis. Primary pathology is luminal obstruction but seldom caused by FBs.⁵ Pins were

commonest FB’s in the appendix.^{1,3} However, metallic screw causing appendicitis is very rare with one case reported in a 4 yr old boy with 4 mo history of abdominal pain.⁴ Another case had two metallic screws and multiple other FBs making the appendix a junkyard.⁶ Our infant also developed appendicitis after 4 mo. Mild change in position of FB restricted to RIF on serial AXRs in our case indirectly suggested FB impaction within a mobile structure like appendix or rarely in Meckel’s diverticulum, ileum or mobile cecum. Sharp FBs can cause appendicular perforation within days of ingestion³ but blunt FBs cause appendicitis even decades later as luminal obstruction occurs by gradual accumulation of hard fecolith over the FBs.^{3,5} Treatment of FB appendicitis is appendectomy, but prophylactic appendectomy is considered in asymptomatic cases (risk of delayed appendicitis)^{3,5} and we recommend it where patient follow up is uncertain. More such reports will further establish the predilection of screws to the appendix and this might be labeled as a special entity called as ‘Metallic screw- Appendicitis’.

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Fig. 1. AXR showing screw in the right iliac fossa.

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