

# An unusual case of impacted esophageal foreign body

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## ABSTRACT

Incidental ingestion of foreign bodies in the pediatric age group is a recognized problem worldwide, however, it is unusual to have a neonate who presents with impacted esophageal foreign body. As such, this case is rare and considered a new form of child neglect.

**Keywords:** Foreign body, child abuse, neonatal neglect.

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Ingestion of foreign bodies in the pediatric age group is a recognized problem worldwide. The age range most at risk is said to be from 5 months to 8 years,<sup>1</sup> with a peak between the 1st and 3rd years.<sup>2</sup> The lower age thresholds correspond to stages of maturity in coordinating hand to mouth movement, so to get a neonate ingested foreign body is very rare. Is it a new form of child abuse? Our case report therefore would appear to be unique, as the baby was only 20 days old, where he is unable to handle an object by him self, we consider this case as a new form of child neglect. Our objectives are to increase the orientation to the possibilities of foreign body (FB) ingestion even in neonates and highlight the underestimated issue of child abuse in our society.

**Case Report.** A 20 day old female neonate was referred to the pediatric department of King Khaled General Hospital in Al-Majmaah with a 2 day history of cough, difficulty in feeding, difficulty in breathing and fever. She is the product of full term pregnancy with no neonatal complications. The child was doing well until these symptoms developed 2 days prior to presentation.

On examination the baby was ill, febrile (38°C), pulse rate 145/minute, respiratory rate was 50/minute and weighed 3.9kg. Examination of the chest revealed marked inspiratory and expiratory rhonchi. Other systemic examination was normal. A chest x-ray (x-ray film) showed a radio-opaque pointed object with a wide base in the chest inlet. There was however no clinical or radiological evidence of surgical emphysema. The patient was referred immediately for endoscopy. Under general anesthesia with endotracheal intubation, an overtube (infant size esophagoscope) was passed into the esophagus in order to minimize further trauma to the wall.<sup>1</sup> The foreign body was eventually extracted with much difficulty. The object was found to be a Tack (Nail-like), used as a fastener and it measured 1.5 cm in the long axis and 1.0 cm in diameter in the circular base (Figure 1). Post-operatively, a nasogastric tube was passed into the stomach for the dual purposes of feeding and protecting the esophagus in case of possible perforation. The patient was started on ampicillin and gentamicin for a total of 7 days. The recovery phase was uneventful as evidenced by the resolution of the pre-operative

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**Figure 1** - The x-ray showed a foreign body impacted in the esophagus in the inlet of the chest.

fever and lack of development of surgical emphysema or cellulitis, post operative chest x-ray was found to be normal. On the 5th post-operative day the nasogastric tube was removed & breast-feeding resumed. This was well tolerated and the child was subsequently discharged home.

**Discussion.** This case is unusual considering that the patient was only 20 days old at presentation. Indeed by the account obtained from the history, the incident might have occurred at least 2 days earlier when she was just 18 days old. The foreign body caused the respiratory distress by its compression of the trachea anteriorly with the wide base. The question that immediately came to mind was how did a 20 day old child swallow such an object? Most accounts in the literature would have the lower age threshold for ingesting foreign bodies at 5 months<sup>1</sup> or

12 months.<sup>2</sup> However, Reilly, et al<sup>3</sup> recorded the lower age limit of 1 month in their multi-institutional study of aero-digestive tract foreign bodies in children in the United States of America. Unfortunately the authors did not state what and where the foreign body was lodged in the case of the 1-month-old patient. When the mother was informed of the result, she claimed to have recollected leaving the baby with another older sibling aged 4 years. It is therefore possible that her older brother playfully inserted the object into the mouth of his baby sister.

We consider leaving a young baby with a young sibling unattended a form of child neglect as it threatens their life, as happened in this patient. We do not know exactly the incidence of child abuse in this country but it was estimated to be 4-11 cases per 100,000 in the United States.<sup>4</sup> So, extensive work to develop a program for estimation workup and prevention of child abuse in this country is urgently needed.

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