



IMAGES IN PAEDIATRICS

Danger of bronchoaspiration in children's public spaces

Peligro de broncoaspiración en lugares infantiles públicos



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A boy aged 9 months was brought in after unintentional ingestion of rubber from a children's playground (Fig. 1) associated with an episode of choking with cough, respiratory distress and facial cyanosis lasting a few seconds. The salient symptoms thereafter had been intermittent stridor and cough.

The vital signs were good, with no respiratory distress, but the expiratory stridor persisted, especially when the child was agitated, with diffuse wheezing predominantly originating from the right upper lobe.

The findings of the chest radiograph (Fig. 2) were compatible with the presence of a foreign body. The patient underwent an urgent flexible bronchoscopy (Broncho Fiberscope FB-8V, 2.7 mm; Pentax, Japan) that confirmed the presence of the foreign body in the right bronchus (Fig. 3a). The foreign body was removed with a stone extraction basket (NGage Nitinol Stone Extractor, 2.2 Fr; Cook Medical, Ireland), typically used for removal of urinary stones (Fig. 3b). Although rigid bronchoscopy is the first choice for removal of an aspirated foreign body, flexible bronchoscopy



Figure 1 Rubber flooring in a typical playground.

can be an effective alternative in centres with experience in its use.¹

Eighty percent of paediatric episodes of foreign body aspiration occur in children aged less than 3 years,¹ and this is an important cause of accidental death in infants under 1 year.² Therefore, we must stress the need to implement

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Figure 2 Chest radiograph. Radiopaque feature in the right perihilar area, with no signs of air trapping.

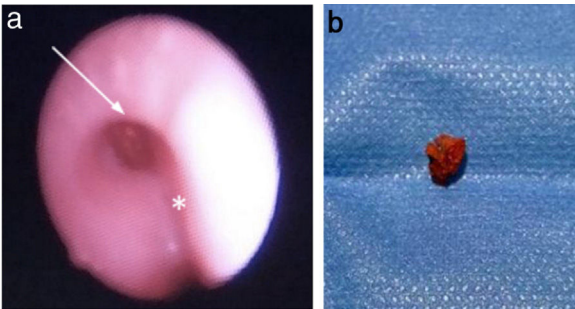


Figure 3 (a) Flexible bronchoscopy: foreign body (arrow) in the right bronchus (carina, asterisk). (b) Removed rubber fragment measuring 5 × 4 mm (L × H).

preventive measures such as reconsidering the appropriateness of using rubber flooring on playgrounds in the context of current European standards.³ Despite its advantages, such as its cushioning effect and slip-resistant properties, its safety is questionable because its structural integrity cannot be guaranteed. It is easily torn by children, especially if maintenance is deficient, producing small-sized particles that can cause severe episodes of bronchial aspiration.

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