

Case Report

“The lucky penny” – an incidental finding of hip dysplasia in a child with foreign body ingestion

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Accepted 17 September 2004

Undetected hip dysplasia can lead to significant morbidity. We report a case of development hip dysplasia, which was diagnosed incidentally following radiographic investigation for an ingested coin.

CASE REPORT A two-year-old girl was brought to the emergency department following the ingestion of a one pence coin. A thoraco-abdominal radiograph demonstrated the presence of a coin within the first part of the duodenum (*Fig 1*).

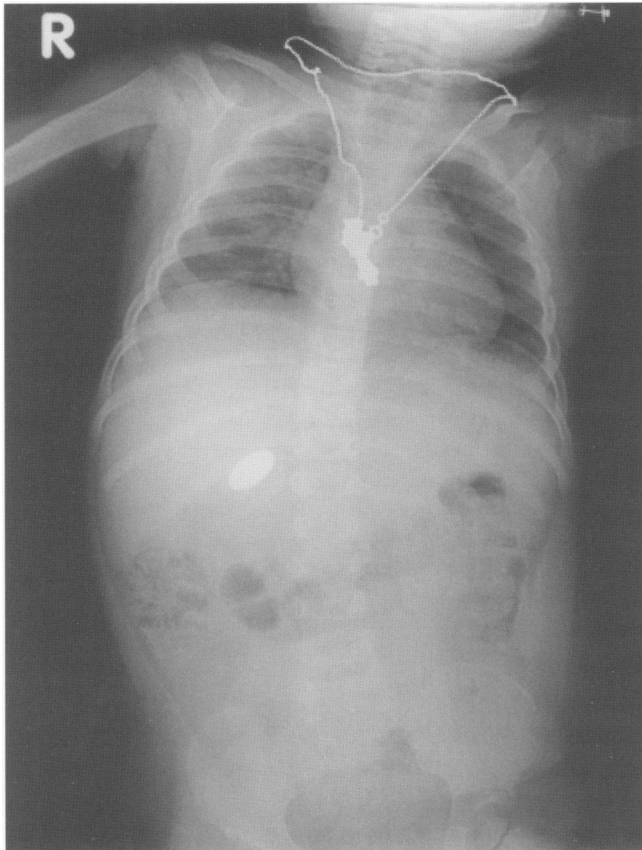


Fig 1. Thoraco-abdominal radiograph demonstrating a coin within the first part of the duodenum.

On closer inspection of the radiograph by the reporting radiologist, it was also noted that the right acetabulum was dysplastic, with uncovering of the femoral head. The child was subsequently referred to the orthopaedic department.

From the history, there were no associated risk factors for hip dysplasia and the child was asymptomatic with normal developmental



Fig 2. Pelvic radiograph demonstrating dysplasia of the right acetabulum (note the shallow socket with uncovering of the femoral head).

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milestones. Clinical examination was unremarkable.

A pelvic radiograph (*Fig. 2*) confirmed the presence of right-sided acetabular dysplasia with approximately 50% of the femoral head being uncovered. The left hip was unaffected. A reconstructive pelvic osteotomy is planned.

DISCUSSION

Coins are the most commonly ingested foreign body, occurring in approximately 4% of children at some time.¹ A chest x-ray including the abdomen is recommended to ensure that the coin is below the diaphragm and not lodged within the upper airway or oesophagus.²

Developmental dysplasia of the hip is a spectrum of disorders of development of the hip that ranges from poor development, or dysplasia, of the acetabulum to frank dislocation. It is a disorder that evolves over time and has been described by Klisic as a "dynamic disorder potentially capable of getting better or worse as the child develops".³ Risk factors include being, female, first-born, breech presentation and pregnancies complicated by oligohydramnios.⁴⁻⁷

Dysplastic hips usually become painful and develop degenerative changes with time. As the degenerative disease progresses, the hip often becomes subluxed resulting in significant pain and disability. This often occurs in late childhood or adolescence.^{8,9}

In this case, a thoraco-abdominal radiograph which was taken to investigate an ingested coin, revealed a previously undiagnosed and asymptomatic dysplastic hip joint highlighting the fact that significant hip dysplasia can exist undetected until complications develop. A reconstructive pelvic osteotomy is planned in an attempt to minimise the associated risk of premature arthritis. The swallowed coin may prove to be this child's 'lucky penny'.

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