

be removed by dialysis (Sorrentino et al, 2011). Zeng et al (2008) showed that continuous renal replacement therapy for rhabdomyolysis can significantly shorten length of hospital stay compared to conventional therapy. However, a Cochrane review found continuous renal replacement therapy did not reduce mortality or rates of adverse events (Zeng et al, 2014). There is insufficient evidence to mandate the early use of continuous renal replacement therapy for prevention of rhabdomyolysis. In this case continuous renal replacement therapy was used for removal of both myoglobin and of the underlying cause – the caffeine.

Conclusions

Caffeine ingestion can be fatal. Its complications are predictable and manageable in most critical care units. Although theoretically attractive, continuous renal replacement therapy is not necessary

for the management of caffeine overdose unless other indications exist. **BJHM**

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LEARNING POINTS

- Caffeine is the most widely used psychoactive drug in the world but its ingestion can be fatal.
- Management of overdose includes correction of electrolyte disturbances, administration of magnesium sulphate for rhythm disturbances, control of hypertension and volume replacement.
- Although not mandatory, continuous renal replacement therapy should be considered in patients who develop rhabdomyolysis following caffeine overdose.

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Images in Medicine

Accidental ingestion of two magnets: should we intervene?

An increase in the number of cases of magnet ingestions in children leading to serious complications including death has been reported (North American Society for Pediatric Gastroenterology, Hepatology and Nutrition, 2013; Shalaby, 2015). A retrospective multicentre French study with 40 children reported that 88% of multiple magnet ingestions needed interventional management by endoscopy or surgery *vs* only 12.5% of cases of ingestion of a single magnet (Talvard et al, 2015).

A 7-year-old boy accidentally swallowed two 0.5x2 cm magnets. At presentation

4 hours post-ingestion, he was asymptomatic. Abdominal X-ray (*Figure 1*) confirmed

Figure 1. Abdominal X-ray showing two ellipsoid metallic opacities projected over the left upper abdomen consistent with foreign bodies within the stomach.



foreign body with normal bowel gas pattern. At endoscopy both magnets were at the gastric fundus with gastric mucosa trapped between them, so endoscopic retrieval was unsuccessful. The magnets were retrieved through an open small anterior gastrotomy under fluoroscopic guidance. The postoperative period was uncomplicated.

Simultaneous ingestion of two magnets may falsely reassure the physician that they are stuck together so can be treated as a single magnet. Suspicion of magnet ingestion should be included in the differential diagnosis of acute abdomen in children. **BJHM**

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