

Correspondence

Endoscopic retrieval of miniature battery

SIR,—As experience accumulates, so a compromise policy on the timing of surgical or endoscopic intervention has emerged in cases of miniature battery ingestion. Early endoscopy, in the protocol of the Long Island Regional Poison Control Centre¹ is mandatory if the battery is sited in the oesophagus or persists in the stomach after 24 hours. Otherwise, it is described as optional.

We would like to emphasise two points emerging from a recent case of battery ingestion in a 3 year old child, where radiological confirmation of the battery in the stomach was followed by a decision to attempt early endoscopic removal with a paediatric endoscope under general anaesthetic at four hours after ingestion:— (I) On experimenting with a similar battery before the endoscopy, it was clear that the basket forceps were less successful than the toothed forceps (which could accommodate the battery side-on), because of the smooth slippery surface of the casing. If coin grasping forceps are too small or not available, toothed forceps in our opinion are the next best option. (II) At only four hours, the difference in the casing of the battery on retrieval compared with its unswallowed partner, was striking.

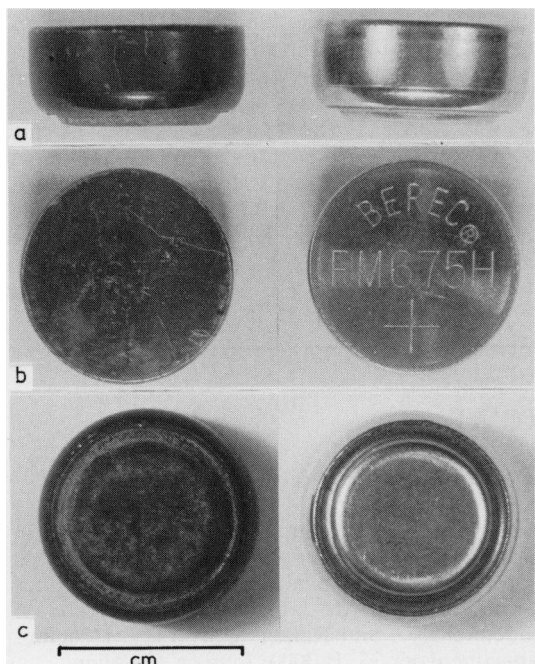
In vitro tests at pH 1.5 have shown evidence of leaking as early as two hours.² The urinary mercury level was not raised, nor was there endoscopic evidence of mucosal damage in this case, but we remain impressed by the early dissolution of the swallowed battery casing. In a review of 56 cases,³ symptoms developed in four of 51 cases where the battery passed the cardia. Early endoscopic removal not only removes any danger of toxicity, but also greatly reduces radiographic exposure and hospital stay.

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References

- 1 Mofenson HC, Greensher J. Ingestion of small flat disc batteries. *Ann Emerg Med* 1983; **12**: 88–90.
- 2 Nolan M, Tucker I. Health risks following ingestion of mercury and zinc air batteries. *Scand Audiol* 1981; **10**: 189–91.
- 3 Litovitz TL. Button battery ingestions: a review of 56 cases. *JAMA* 1983; **249**: 2495–500.



Books

Fundamentals of gastroenterology Edited by Lawrie W Powell and Douglas W Piper. (Pp. 265; illustrated; £19.95.) Bristol: Wright, 1984.

This book is one of many short texts on gastroenterology aimed at medical students and young postgraduates preparing for examinations. The fact that it is in its 4th edition (the first having appeared in 1975) suggests that it finds a ready market. Almost a fifth of its pages are given over to a series of multiple choice questions which are referenced to appropriate pages in the text.

The first six chapters deal with different gastrointestinal organs; the remaining cover infectious diseases, hormonal GI diseases, functional diseases, endoscopy, and common symptoms. In 200 pages it is clearly impossible to cover these topics comprehensively and there are inevitably omissions and a number of minor errors because of over-simplification. Sadly, as the book is aimed at medical students, little attention is paid to the anatomy, physiology, and biochemistry which is needed to understand diseases of the gastrointestinal tract and liver. Most chapters have a list of