

laparotomy<sup>1</sup> or were examined post mortem.<sup>13 14</sup> An appreciable proportion of patients, however—14% in the Public Health Laboratory Service series<sup>9</sup>—had fresh blood, pus, or mucus in their stools, suggesting colorectal inflammation. The presence of proctitis in eight of the 11 patients in the present series suggested that colonic inflammation occurred commonly in those patients whose symptoms were severe enough to require hospital admission, and may have played an important part in producing the diarrhoea.

It is accepted that infection with salmonella, shigella, or amoeba should be included in the differential diagnosis of irritable bowel disease, and our findings indicate that campylobacter should be considered. The changes seen on sigmoidoscopy and with a barium enema have little value in differentiating campylobacter colitis from irritable bowel disease, and, moreover, the histology of rectal biopsy specimens may show changes of this disease, thus compounding the problem. The importance of comprehensive bacteriological studies in all patients presenting with bloody diarrhoea cannot be overemphasised. Patients who in the past were diagnosed as having irritable bowel disease on clinical, sigmoidoscopic,

and histological grounds may well have been suffering from unrecognised campylobacter colitis.

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# SHORT REPORTS

## Mercury battery ingestion

When a child presents in the casualty department having swallowed a foreign body, it is standard practice to leave this to pass naturally if it has reached the stomach.<sup>1 2</sup> This report describes a case where such action would have been hazardous.

### Case report

The patient, a 2-year-old boy, presented one hour after ingestion of a small camera battery. An x-ray film showed it to be in the fundus of the stomach. The parents were advised to observe him at home and sift the faeces for the battery. Twenty-four hours later he was brought back to the casualty department, having passed a black stool. He was physically well apart from an upper respiratory tract infection. Rectal examination showed a dark stool, typical of iron discoloration rather than melaena. A further x-ray film showed that the battery was in its previous position.

At this stage advice from the makers of the battery in question (an Ever Ready PX 625 dry cell) was sought. The contents were given as roughly 2 g of mercuric oxide interleaved with zinc amalgam in a stainless steel case. Their view was that this was unlikely to corrode swiftly, but we thought it advisable to make a test of the battery's solubility in view of the danger to the child if its contents should be released, since the estimated lethal dose of ionised mercuric salts is about 0.5-1 g.<sup>3</sup> The parents had brought a similar battery to the hospital so this was tested by placing it in an N/20 solution of hydrochloric acid prepared by the pharmacy, with a pH of about 1.5. Some five hours later it was inspected and found to be discoloured and bubbling vigorously.

Operative removal was then undertaken, the battery being extracted through a gastrotomy. It was observed to be heavily corroded and, in fact,

fell in two during removal (figure). The question was then raised whether toxic ingestion of either iron or mercury had occurred. Estimation of the serum iron concentration showed that this was normal at 12  $\mu\text{mol/l}$ . Blood was sent to Guy's Hospital Poisons Unit for estimation of its mercury concentration; the result, available the next day, was 10  $\mu\text{g/l}$  (normal < 15  $\mu\text{g/l}$ ). Meanwhile the child showed no sign of toxicity and his urine contained no mercury on testing with potassium iodide. He was allowed home on the sixth postoperative day.

### Comment

Mercury batteries are probably an easily swallowed source of potentially fatal poisoning for children, especially since the small button-sized battery used in some cameras might be mistaken for a sweet. On the basis of this experience early operative, rather than conservative management, is indicated for this particular foreign body.

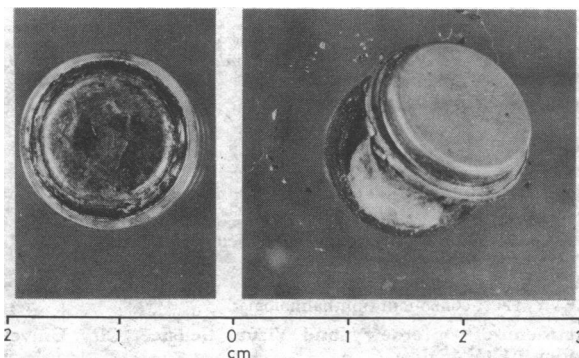
I thank Guy's Hospital Poisons Unit for their help and Mr D F L Watkin for permission to report the case under his care.

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Battery after five hours in N/20 hydrochloric acid. Right: similar battery on removal after 30 hours in the stomach.

## Defective colour vision in diabetes: a hazard to management

Benedict's test for glycosuria and its modification Clinitest require adequate colour vision for correctly interpreting results. Defective colour vision in a diabetic patient was reportedly responsible for mistaken Clinitest readings with consequently impaired control.<sup>1</sup> We have therefore surveyed a diabetic clinic population to discover the extent of such colour vision deficiency and determine its possible effects on diabetic control.