In the one case the vaccinating doctor apparently refused to credit either the mother's story or its relation to the vaccination and proposed to proceed with the course (being thwarted by myself), and in the other where the injection/collapse interval was two to three days the relationship was suspected by neither the vaccinating general practitioner nor the father (also a doctor) until a similar event followed the second injection.

Dr. Forrester is surely right to say that these severe reactions are largely undocumented. A report by Berg¹ of the seventh case of pertussis immunization encephalopathy reported in Great Britain was followed by a letter from Drs. Thursby-Pelham and Giles² saying that they had themselves seen six cases in 10 years (their experience apparently paralleling that of Dr. Forrester). Berg³ commented that if the danger of pertussis vaccination was greater than commonly thought, then this could be established only by bearing in mind the possibility of reactions and reporting their occurrence. He suggested that the relatively large number reported from the United States was due to a greater awareness of, and interest in, the problem there. Subsequently there appeared in the correspondence columns of the *B.M.J.* a number of reports of collapse and encephalopathy,^{4,5} and then the subject dropped from sight.

Some concern has been caused in Sweden by these reactions,⁶ and a leader in the *B.M.J.*⁷ discussing the reports has noted that our experience was a happier one. Clearly we do not all agree.

Apart from death or neurological damage directly due to vaccination, a reaction of collapse could clearly lead in some cases to asphyxiation and/or inhaling of vomit. One wonders how many cot deaths might be due to this cause.

Many of your readers may be unacquainted with a report by Hopper⁸ analysing reported reactions in 1,700 children receiving pertussis or triple immunization. There were six reports of collapse and 27 of persistent vomiting or persistent uncontrollable screaming.

An odd feature of all this is that by my reading of the reports of the extensive Medical Research Council trials,⁹⁻¹¹ a complication identifiable as "collapse" is not there described, though it is possible to feel that the association of convulsions with the immunization was a little too easily dismissed.

It had been my experience until recently that on direct questioning the great majority of mothers would report some reaction after pertussis or triple immunization, but in the past few months they had seemed to be responding in this way far less often. All my recent experience had been with Glaxo vaccines, and so I wrote inquiring if the vaccine had been changed. Glaxo replied to the effect that they had been able to reduce the number of organisms in their vaccine and yet still pass the prescribed potency tests.

Accepting that the intensity and frequency of serious or fatal reactions vary with changes in the vaccine, then insufficiently supervised changes introduced to increase effectiveness, as recently recommended, might have nasty consequences, and in any event would inhibit proper assessment of the vaccine's properties in this respect. I therefore suggest that pertussis immunization should be subject to continuous monitoring, or that all changes in

vaccine should be preceded by large-scale trials.

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Acute Hepatitis

SIR,—I endorse Dr. A. J. Zuckerman's plea (21 August, p. 482) for the more accurate mapping of acute infective hepatitis. During the past 11 months I have recorded the sporadic occurrence of this disease in my patients, who form part of a large semi-urban group practice. The diagnosis in each case rested on firm clinical and biochemical evidence, often with serum glutamic-pyruvic transaminase values of over 1,000 units.

Since October 1964 24 cases have occurred—13 male and 11 female—with the following age distribution:

Age (years)	Male	Female	Total
0-5	2	5	7
6-10	7	3	10
10+	4	3	7
	13	11	24

This gives an estimated incidence of about 7 per 1,000; even if this cannot be applied to the country as a whole, it is obvious that the disease is common. Incidentally, only one patient was referred to hospital.

As 17 of these 24 patients were under 10 (indeed, over a quarter of the series were 5 years and under) it is unlikely that in later years they will have any recollection of having had the disease, and some will become blood donors. The reliance on a previous history of an attack of jaundice is simply not good enough, and yet for the judicious selection of donors what other criterion have we? This is a problem requiring more thorough examination.—I am, etc.,

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JAMES D. E. KNOX.

Dangers of Not Wearing Dentures

SIR,—Recent correspondence has outlined some dangers directly attributable to wearing dentures—such as those of radio-translucent dental plates (31 July, p. 302; 14 August, p. 420)—and another case is described in which the expulsion of a foreign body from the bronchial tree took place by physiological means (14 August, p. 420).

The following case is interesting in this context in that the primary cause of trouble was the *absence* of dentures, and that it also shows two other unusual features.

Mr. G. B., an intelligent businessman aged 56 years, was first seen at 9.30 p.m. on 12 May 1964 complaining of pain in the throat of sudden onset two hours previously whilst eating chicken Maryland. He stated that on medical

advice he had worn no dentures for the previous year following a parotidectomy. He pointed to the thyroid cartilage as the level at which he had felt something was lodged initially, but by the time he was seen he located the discomfort at the level of the angle of Louis.

Examination revealed a right-sided scar consistent with a parotidectomy. The patient was edentulous. Displacement of the larynx caused only mild discomfort, indirect laryngoscopy revealed generalized redness of the hypopharynx, but no contusion, abrasion, or foreign body was visible. In view of the presumed downward progress of the foreign body it was decided not to institute any immediate investigation or endoscopy but to await events.

However, the patient returned the following morning with the story that during the night the pain had descended to mid-sternal level, and that soon after awakening in the morning he had vomited a lump of meat, which he had brought for inspection. He was then able to swallow normally, apart from slight discomfort.

The vomited specimen was found to consist of a single mass of chicken meat, measuring 7×3×3 cm.—i.e., almost 3 in. in length, from both ends of which the extremities of a bone protruded and were clearly visible.

It is unusual for an otherwise healthy, intelligent, conscious adult to ingest such a large foreign body, and doubtless this would not have occurred had he been wearing dentures.

The other unusual feature is the ejection of the foreign body at such a late stage. Usually once a large foreign body has entered the lumen of the oesophagus proper it either passes into the stomach or remains impacted and requires endoscopic removal.—I am, etc.,

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Spontaneous Hypoglycaemia Due to Retroperitoneal Mesothelioma

SIR,—In the article by Dr. N. Samaan and others (24 July, p. 195) the identification of the two tumours as mesotheliomas appears to rest on insufficient evidence.

The tumours are described as "cellular, vascular, fibrous tumours, composed of irregular narrow bands of collagen between masses of spindle-shaped cells. . . ." Tumours of this type associated with hypoglycaemia have previously been identified as fibromas or fibrosarcomas,^{1,2} and, while Ackerman³ suggests that such neoplasms of the retroperitoneum may be of mesothelial origin, this view has not gained general support. Similar lesions in other organs associated with hypoglycaemia have been considered to be of mesodermal rather than mesothelial derivation.^{4,5}

It is dubious whether any peritoneal mesotheliomas in man can be considered benign; Evans⁶ does not admit of the possibility. An exception can be made for "adenomatoid tumours" in the Fallopian tube if derivation of such neoplasms from mesothelium is accepted.⁷ In the collected series of mesotheliomas of Winslow and Taylor⁸ and of Godwin⁹ no evidence of hypoglycaemic symptoms was found. The occurrence of hypoglycaemia cannot be correlated with the presence or absence of "epithelioid" cells in mainly spindle-cell tumours.² It does not appear that a convincing case has been made for the mesothelial origin of retroperitoneal spindle-cell tumours, and it seems better to