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,45 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. 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 Hopper 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 Giaxo 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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REFERENCES

REFERENCES

1 Berg, J. M., Brit. med. 7., 1958, 2, 24.
2 Thursby-Pelham, O. C., and Giles, C., ibid., 1958, 2, 246.
3 Berg, J. M., ibid., 1958, 2, 385.
4 Bousfield, G., ibid., 1958, 2, 329.
5 Andrews, J. N. H., ibid., 2, 385.
6 Ström, J., ibid., 1960, 2, 1184.
7 Brit. med. 7., 1960, 2, 1215.
8 Hopper, J. M. H., Medical. Offr, 1961, 106, 241.
9 Medical Research Council, Brit. med. 7., 1951, 1, 1463.
10 — ibid., 1956, 2, 454.
11 — ibid., 1959, 1, 994.

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	Fem ale	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 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.,

JAMES D. E. KNOX. Edinburgh.

Dangers of Not Wearing Dentures

SIR,—Recent correspondence has outlined some dangers directly attributable to wearing dentures-such as those of radiotranslucent 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 single mass of chicken meat, measuring $7 \times 3 \times 3$ 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 spindle-shaped masses of cells. . . . Tumours of this type associated with hypoglycaemia have previously been identified as fibromas or fibrosarcomas,12 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 Godwin 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

regard the tumours in the two patients of Dr. Samaan and his colleagues as of fibromatous type in the present state of the evidence.-I am, etc.,

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REFERENCES

REFERENCES

1 Stauffer, J. M., Granville, G. E., and Law, S. W., New Engl. J. Med., 1961, 265, 979.
2 Oleesky, S., Bailey, I., Samols, E., and Bilkus, D., Lancet, 1962, 2, 378.
3 Ackerman, L. V., in Tumours of the Retroperitoneum, Mesentery, and Peritoneum. Atlas of Tumour Pathology, Armed Forces Institute of Pathology, Section 6, Fascicles 23 and 24, 1954. Washington, D.C.

Scholz, D. A., Woolner, L. B., and Priestley, J. T., Ann. intern. Med., 1957, 46, 796.

Volk, B. W., Goldner, M. G., and Wainfeld, B., Geriatrics, 1960, 15, 473.

Evans, R. W., The Histological Appearances of Tumours, 1956, p. 68 et seq. Livingstone, Edinburgh.

Tumours, 1956, p. 68 et 1947. Ethingstone, Edinburgh.

Masson, P., Riopelle, J. L., and Simard, L. C., Rev. canad. Biol., 1942, 1, 720.

Winslow, D. J., and Taylor, H. B., Cancer (Philad.), 1960, 13, 127.

Godwin, M. C., ibid., 1957, 10, 298.

Diagnosis of Hysteria

SIR,-The letter of Dr. L. J. F. Warnants and Dr. D. H. Marjot (14 August, p. 422) stimulates the question: "What is mental illness?"—as do also the theories of Szasz' and to some extent those of Barbara Wootton.2

The impression given by what might be called this school of thought is that mental illness is a more subtle form of malingering, and by implication that there is no ' mind" or mental illness in any way comparable to bodily disease. Any illness with prominent mental disturbance is aetiologically on a par with the general diseases and simply a part of them; otherwise mental and behaviour disorder constitutes "the higher malingering." Assuming the role of the sick person and seeking thus to manipulate others is something usually thought to be deserving of discouragement, ranging from mild to severe; and the main effective ways to discourage patterns of behaviour would seem to be the various forms of moral pressure, up to and including frank punishment. A move in this direction under the terminology of "conditioning" seems to be emerging from some of the behaviour therapy work of Eysenck³ and others.

All these developments suggest the supposition that previous generations were more accurate about human behaviour than we are, and that we may have to jettison a good deal of largely twentieth-century thinking in our approach to problematical human behaviour; possibly returning to older, traditional methods.

The problem, if followed through, reveals a cultural and basically moral nature. Despite reluctance and even squeamishness at such philosophical exposure it seems necessary to face it; otherwise the issue promises to remain obscure and resist resolution.-I am, etc.,

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REFERENCES

Szasz, T. S., The Myth of Mental Illness, 1962. Secker and Warburg, London.
 Wootton, Barbara, Social Science and Social Pathology, 1959. Allen and Unwin, London.
 Eysenck, H. J., Behaviour Therapy and the Neuroses, 1960. Pergamon Press, Oxford.

Triple Primary Carcinomas

SIR,—A case of triple primary carcinomata recently reported by Mr. E. Wilson, Dr. A. G. Finley, and Mr. M. Killingback (10 July, p. 80) prompted me to write about a patient who had three primary carcinomas in separate sites.

A 75-year-old man was admitted to this hospital on 21 May 1965 with a three-week history of haemoptysis. He also complained of bleeding per rectum for a month. He had lost about 6 st. (38.1 kg.) in weight over a period of four years. In his past illness there was a history of operation in 1961 for a growth just below the left clavicular region (squamous cell carcinoma of skin).

Examination of the patient revealed no finger clubbing. The lymph glands were not enlarged. There was impaired note and diminished breath sounds at the right base of his chest; heart sounds were normal. Blood-pressure was 120/80 mm. Hg. Liver and spleen were not enlarged. Central nervous system showed no abnormality.

Rectal examination revealed a growth within easy reach of the finger.

Investigations: haemoglobin 76%; W.B.C. 6,400. Sputum showed no malignant cells. Radiograph of the chest showed a collapse of the right lower lobe. On bronchoscopy there was a narrow and irregular lower lobe bronchus; the bronchial biopsy was reported as showing an oatcell carcinoma. On sygmoidoscopy there was a polypoid growth from which a biopsy taken revealed a well-differentiated adenocarcinoma of the rectum.

As the general condition of the patient did not permit surgery he was put on cyclophosphamide 100 mg. twice a day. After a week his white cell count dropped to 1,400/c.mm. His condition gradually deteriorated and he died on 10 June 1965.

The identification of multiple primary malignant tumours is based on the criteria of Warren and Gates.1 These are: (1) each tumour must be malignant; (2) each tumour must be adequately separated from its neighbour; and (3) neither must be a metastasis.

The case described above fulfils these criteria. The presence of multiple primary tumour in separate sites was proved beyond doubt on histological grounds. Each growth was primary and malignant with no evidence of metastasis.-I am, etc.,

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REFERENCE

Warren, S., and Gates, O., Amer. J. Cancer, 1932, 16, 1358.

E.C.G. Changes in Leptospirosis

SIR,—The E.C.G. changes described by Dr. M. Parsons (24 July, p. 201) in patients suffering from leptospirosis are very similar to those we found in patients with tick typhus at the British Military Hospital in Nairobi1. A full account of our findings is in preparation, but briefly such changes were nonspecific and mainly confined to T-wave inversion in one or more leads. No clinical evidence of myocarditis was found, and any rise in the S.G.O.T. level was usually accompanied by an equal rise in that of S.G.P.T.

While fever may be a factor in such E.C.G. changes, the possibility of a direct, albeit patchy, involvement of the myocardium or a toxic² or an allergic response³⁻⁵ initiated by the infecting organism cannot be

conclusively excluded without further studies. The prolonged convalescence, with tachycardia and poor exercise tolerance, that is sometimes required in these two diseases may point to cardiac involvement.

Similarly in malaria, especially of the subtertian type, myocardial damage might well produce E.C.G. abnormalities, although two publications⁶ do not support this view.

British Military Hospitals in overseas stations are in a good position to investigate further the E.C.G. changes that may occur in various infective diseases.-I am, etc.,

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REFERENCES

Salazopyrine and Smoking

SIR,—One of my patients, a man of 56, who has ulcerative proctitis, has been treated with salicylazosulphapyridine, the initial dose being 1 g. q.i.d. for four months, then an interval of two months without treatment, and for the last six months he has been on a maintenance dose of 0.5 g. b.d.

He informs me that the drug produces a strong aversion to cigarette smoking, particularly the smell of the tobacco smoke, and he has now ceased smoking altogether because of this. At one time he smoked 20 cigarettes a day. During the two months' interval when he was not taking the drug he smoked again and the distaste for cigarettes was not present.

It would be interesting to note whether any of your other readers have seen this useful effect in any of their patients taking this drug.-I am, etc.,

Harrow Hospital, Middlesex.

R. NEWCOMBE.

Viruses and Acute Respiratory Infections

SIR,—Your editorial on the working party's report of the present facts concerning acute respiratory infections in Great Britain (7 August, p. 313) rightly draws attention once more to the complexity of infectious agents and the difficulties attending active immunization. Suppose that some multiple vaccine could be contrived to give even partial immunity from common colds; is it not likely that the present viruses would mutate to new serotypes in a few years and require new vaccines? This theme is, surely, a variant of the bacterial antibiotic race.

In the era of Pasteur we have been asking the bacteriologists, and now the virologists, for the answers to our questions on most acute diseases; they have never failed to find the "causative agent." Unfortunately these appear to be omnipresent, irrepressible, and immune to total elimination. In fact they come back more virulent and aggressive after each sortie of ours to control them. We were taught as students that infection depended on bacterial virulence and host resistance. Is it