I agree with Dr. Todd that aspirin may well have been a proper drug to prescribe for the "subjects" that he questioned. He tells us that, as a profession, our fault is not the failure to give treatment, but the giving of too much treatment. "Steroids, chloroquine, gold, and phenylbutazone are all dangerous drugs which should be reserved for the severely afflicted but which are too often given to patients with minor diseases who 'demand' that something be done."

If treatment means just the prescription of drugs he has a case, but every experienced family doctor and many consultants know that proper advice is advice proper to the individual patient, and that the prescription of drugs forms only a small part of the management of the patient. When we see an out-patient for the first time, we do not know if this patient is suffering from "a minor disease," or will in five years' time be "severely afflicted" and be suitable for treatment with "dangerous drugs"—a stage at which these drugs may be dangerous but will almost certainly be ineffectual in preventing disability.

Complications usually arise because these drugs are given in unnecessarily large doses and for too long a period of time. If the doctor, before prescribing, listens carefully to what his patients tell him, he will realize that in many of his patients the dominant complaint is not the morning stiffness, pain, and joint swelling, which are accepted as characteristic of early rheumatoid arthritis, but anxiety, frustration, and a fear of crippling which are common early manifestations of this disease and can be relieved by sympathy and willingness to understand the patient and his problem, accompanied sometimes by a prescription for one or two aspirin.

In a few patients the symptoms and signs that are manifest are due essentially to the structural changes of early rheumatoid disease. In those patients gold and steroids may be properly prescribed in the early, curable stage of the disease. A simple test can often help in deciding to which group the patient belongs. If at the end of the first consultation a large dose of corticotrophin is given intramuscularly, and the patient is asked to report by telephone at 8 o'clock next morning, those patients who belong to the first group will usually report nausea, headache, and no, or very little, improvement in their joint symptoms; whereas those in the second group will report a "dramatic" improvement, relief of pain, stiffness, often a diminution of joint swelling, an ability to get out of bed, and often dress for the first time in months with speed and comparative ease. That this is a diagnostic test, and that the relief will only be of short duration, should be explained to the patient.—I am, etc.,

London W.1.

FRANCIS BACH.

Unusual Urinary Contaminants

SIR,—The report of a case in which pollen grains are identified in the urine of a female animal attendant (31 July, p. 302) prompts this letter, indicating that while uncommon this source of contamination may not be rare.

A fresh midstream specimen of urine was received in a sterile Universal container from

a woman aged 52 after operation. The urine was examined microscopically unstained, and an object seen. Its size was about 30 microns. No motility was apparent. Rather like Dr. R. A. Holman's example, the wall appeared thin but double; within the object no nucleus could be discerned. The "cytoplasm" exhibited slow Brownian movement. From one pole a "vapour trail" appeared to be arising. Although I am familiar with the possible occurrence of pollen in urine as a contaminant, careful and prolonged observation with added glucose failed to induce formation of a germination tube.

Repeated catheter specimens were free of contamination and the object was reported as a contaminant "yeast." Examination of the ward revealed a similar situation to that described by Dr. Holman.

I am grateful to Mr. C. Smith for drawing my attention to the object in the first place.—I am, etc.,

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Disinfectants for Use in Hospitals

SIR,—On 13 February (p. 408) you published a report on this subject by a Public Health Laboratory Service Committee, of which I was secretary. In this report phenolic disinfectants were recommended for general use; in the absence of any better test it was suggested that "the Chick-Martin coefficient can be employed to arrive at a use-dilution provided that only known broad-spectrum fluids are used."

Further experience has shown that this proviso was in fact necessary. There are on the market a few phenolic fluids of the clear soluble type which are said to have a C.M. coefficient of 1.5 or over but which, when tested, are found to have a narrow antibacterial spectrum. These fluids may well be sufficiently active against the standard strain of *Salmonella typhi* used for the C.M. test, yet they are much less active against such resistant organisms as the pseudomonads. So far there are no official arrangements for the quality control of disinfectants for hospital use; it may therefore be of interest to record the way in which such phenolic fluids are at present evaluated in this laboratory.

Two simple tests are used both of which have now been described in detail elsewhere.¹ First, the minimum inhibitory concentration (M.I.C.) is determined against several organisms, using a standard technique and standard strains. This serves several purposes: it gives an indication of the antibacterial spectrum, because for such phenolic fluids there is a good correlation between the bacteriostatic and bactericidal activity; it enables the most resistant strain to be selected for further tests; and it suggests whether, in such tests, simple dilution will be enough to neutralize any disinfectant carried over or whether specific neutralizing agents will be needed. A capacity use-dilution test is then done, with and without yeast. In principle the test organism used would be that found by the M.I.C. determination to be the most resistant, but in practice this has always been the standard strain of *Pseudomonas aeruginosa* NCTC 6749. Unknown disinfectants

are tested at the maker's recommended use-dilution and then at half or double this, as indicated. Finally, safe use-dilutions can be suggested for clean or dirty situations.

The use of the capacity test is discussed in detail in the paper quoted. Our experience is that it is simple and more reproducible than we had hoped and that it gives results that are intrinsically credible. Black and white fluids (to BS 2462) and some clear soluble fluids show up well, but others are revealed as being substantially inactivated by organic matter or as having a dangerously narrow spectrum.

Our results indicate yet again that there is a need for the evaluation of new disinfectant fluids. Although the tests we have described are straightforward, it would not be economic for them to be made on samples bought by individual hospitals. Much advantage would be gained from bulk purchase and regular quality control by such bodies as regional hospital boards.

Technical methods are now becoming available for the evaluation of disinfectants—what is lacking is the administrative machinery to exploit them.—I am, etc.,

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REFERENCE

- ¹ Kelsey, J. C., Beeby, Melanie M., and Whitehouse, C. E., *Mon. Bull. Minist. Hlth. Lab. Serv.*, 1965, 24, 152.

Immunization Against Poliomyelitis

SIR,—Your leading article (21 August, p. 436) on immunization in poliomyelitis concludes with the statement that the present recommended schedules can be reviewed when full information becomes available on the extent to which victims of the disease at Blackburn had or had not been previously immunized. May I point out that in December 1964 the then London County Council sent a letter to all general practitioners in the County of London informing them that from 1 January 1965 vaccination and immunization records relating to persons over the age of 16 would no longer be accepted nor qualify for payment. This apparent saving of money is now made to look foolish, for records of all immunized persons will be of vital interest.

I am sure that no practitioners have refused to immunize people over 16 because of this cut in payment, and I urge the new London boroughs to request that all immunization records be returned to them in future, whether they pay us or not, in the interests of public health.—I am, etc.,

London S.E.7.

CYRIL FOX.

Immunization Against Whooping-cough

SIR,—Dr. R. M. Forrester's letter (24 July, p. 232) on this question is to be welcomed, particularly where he questions the safety as well as the efficacy of the vaccine. He is right to state that (some) doctors in public health are worried, but no less cause for concern is the too common ignorance of the possibility and nature of these reactions. I would like to mention two illustrative incidents with triple vaccine where children have collapsed in the manner in which he describes.

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.,

Edinburgh.

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