staggering claim, but they adduce no evidence in their support, and we are unaware of any evidence in published reports that would support this contention. Indeed, it is well established that cholesteatoma may occur even after the use of grommets.⁵ Clinical impressions may well be the precursor of clinical research but are not a substitute for it.

In some hospitals it may be expedient to insert grommets at the first operation when the waiting time is long and the refractory case would thus have to endure two delays with all the problems consequent on prolonged deafness. These are not scientific reasons, however, and this should be recognised. In conclusion, may we paraphrase Lildholdt³ on the subject: the use of ventilation tubes in primary serous otitis may result in chronic ear disease.

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SIR,—As much intellectual development takes place in the first four years of life as in the following 13 years, and about 80% of intellectual growth has occurred by the age of 8.¹ Fourteen per cent of 3 year olds are not talking properly² and of these, some are deaf or will have been deaf³ and two fifths will exhibit learning difficulties later on.⁴

These two statements, from reputable sources, have, for many years, been the foundation of my concern about secretory otitis media in preschool children especially. More recent work reinforces this concern.^{5,7}

A puzzling feature of secretory otitis media is the poor correlation among observed hearing loss, performance, and behaviour. Many children cope satisfactorily with hearing impairments which exceed those sustained by many others who do much less well. Part of the explanation may lie in the differing extent to which the quality of the hearing is altered. Observations suggest a possible basis for this alteration.⁸ We have no reliable measure of the quality of hearing in the very young, but anecdotal evidence suggests that it is often faulty. If this is so, it may help to explain why many adults (both medical and non-medical) misunderstand the difficulties sustained by some children with apparently mild hearing impairments, some of whom will respond favourably to insertion of grommets.

I believe that the methods of identification of children with hearing difficulties should be reviewed urgently. The result of a hearing test on any one day (pass or fail) must be balanced by considerations of performance and behaviour. If this were done the concentration of effort might be directed more towards those children who are doing badly. A fluctuating impairment of hearing may be of little consequence to a child who is doing well if parents and teachers understand its nature.

If Dr N Black's article (29 June, p 1963) results in more critical appraisal and better understanding of secretory otitis media he will have performed a service to many children. If, however, it feeds the prejudices of the cynical the reverse will be true. Introduction of private screening clinics for

educational underachievement (not patronised exclusively by the middle classes) may be an expression of the disgust and frustration of many parents who have been told "don't worry, he/she will grow out of it"—some don't.

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What do you work with?

SIR,—Professor W R Lee has reviewed the points that doctors need to consider when answering the question, "Could the illness be due to something at work?" (22 June, p 1846.) We support his viewpoint but would ask how frequently doctors ask about possible occupational influences. For example, among the 71 patients of working age who had been admitted to public hospitals from one parish district in 1974-8 limited occupational data had been recorded in the hospital casenotes for only 10. For the 54 people beyond retiring age a former occupation had been recorded for only two.¹ More recently, on 6 February 1985, we reviewed the hospital casenotes for 184 patients aged 16 years and over who were resident in acute medical and surgical inpatient beds in the Bristol Royal Infirmary. Current occupational status was recorded for 67 of the 78 people of working age. For the 106 people beyond retiring age a former occupation was recorded for only 34. Details of the work undertaken had not been recorded in any of the casenotes for these 184 patients.

Occupational data for newly registered cancer cases are also not always well recorded. In March 1985 we reviewed data held by the South Western Regional Health Authority cancer registry for 200 consecutive and recently registered cases. Current occupational status had been recorded for only three of 100 consecutive new registrations of live patients. The staff of the medical statistics bureau explained that these registration deficits reflected the absence of occupational data in the hospital clinical notes. Among registrations during the same period for cases newly identified from death certificates limited occupational data had, however, been recorded for 89 out of 100 consecutive cases. These differences are important because it has recently been reported that "description of occupations as available in routine information systems has proved invaluable in many analyses and . . . in selected instances the occupational descriptions in the cancer registries may be more relevant than those in death certificates, especially in cancers with prolonged survival."² Without occupational histories differences in social class and exposure to hazards at work cannot be studied. Furthermore, without epidemiological evidence of occupational influences on health clinicians are perhaps less likely to consider detailed occupational histories in their clinical practice.

Our findings suggest that doctors do not often consider occupational influences on health, although

a working party comprised of members from the Royal College of General Practitioners, the Faculty of Occupational Medicine, and the Civil Service Medical Advisory Service has recently reported that "enquiry into occupational factors is an integral part of clinical method."³ It seems therefore that as hospital casenotes are usually compiled by junior medical staff greater effort is needed during undergraduate medical education to emphasise the potential influences of occupation on health. At the very least, students should be taught to ask patients their occupation, to take proper occupational histories, and to bear in mind the possibility of the illness being induced by the occupation.⁴

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Peer review at work

SIR,—I congratulate you on your publication of the paper by Drs J W Dean and P W B Fowler (25 May, p 1555) complete with the referees' comments and authors' replies. This correspondence indeed illustrates some of the problems with the peer review system. It was a help to know that others have had some of the same problems that we have had as authors. While comments made by referees are often helpful, it is indeed distressing when one does not agree with the criticism of the methods. This is especially true, it seems, for statistical matters; and this was well illustrated here. It has even happened that a major criticism was that something was not done which in fact had been done and was clearly stated to be so in the manuscript.

As a suggestion, perhaps matters might be improved if we had to sign our names to our reviews. There would be many problems with this, but the comments made to the authors would probably be more careful, considerate, and constructive. Some journals already suggest this as an option; perhaps the practice should be encouraged?

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Use of a questionnaire in general practice to increase recognition of patients with excessive alcohol consumption

SIR,—The methods used by Drs Paul Wallace and Andrew Haines (29 June, p 1949) are very similar to those used in a recent study we carried out in a general practice in Dundee. Our results show many similarities to theirs but also some discrepancies.

We sent out a postal self administered health questionnaire, largely orientated to cardiovascular disease, to all men and women aged 40-59 registered with a general practice in Dundee. The

questionnaire included questions on alcohol consumption. However, our questions were based on detailing the previous week's drinking, while Drs Wallace and Haines asked about the average frequency of alcohol consumption a week. Our questions were based on those used in other studies.¹

We sent out 409 questionnaires; 37 were returned by the Post Office and 298 were completed and returned—a response rate (73%) comparable with that of Drs Wallace and Haines. The table compares the alcohol consumption in our study and that of the authors. The proportion of

Alcohol consumption in the St Mary's and Dundee studies

	St Mary's		Dundee	
	Men (%)	Women (%)	Men (%)	Women (%)
Non-drinkers	20	37	22	32
Occasional drinkers	17	27	0	0
At least one unit/week	57	32	75	62
Inadequately answered	5	4	3	7
Excessive drinkers	11	5	9	3

non-drinkers is similar in the two populations, as is the percentage of excessive drinkers (≥ 42 units/week for men, ≥ 21 units/week for women). There was, however, a considerable difference in the distribution between these two extremes, with a higher proportion in Dundee drinking alcohol at least one day a week. This difference may reflect a true difference between the population or a difference in the method of ascertaining the weekly consumption.

Detecting excessive alcohol drinkers by postal questionnaire is valuable for anticipatory care. The bimodal distribution in alcohol consumption in men clearly identifies those drinking more than around 42 units a week as a separate population, and this has been shown in other studies.² Detecting individuals at risk in this way is limited to responders, and it has been suggested that non-responders include people with serious drinking problems.³ The previous week's drinking history method is generally regarded as a reliable measure of alcohol consumption and may be considered as a useful alternative to questions on drinking frequency in a self administered questionnaire.

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Artificial urinary sphincters

SIR,—Mr R H Whitaker's leading article (29 June, p 1927) is a kindly word of caution in that firstly it is important that an implantation is carried out by a surgeon trained to do this, and, secondly, careful selection of patients and continuing review for life are prerequisites of sphincter implantation (in both men and women).

Of the several suitable classes of patients, he quotes Mundy and Stephenson's finding that the least suitable are women with genuine stress incontinence. This is not because of the poor cure

rate but because the authors rightly feel that the vast majority of women with genuine stress incontinence can be cured by conventional surgery. However, when adequate conventional surgery has been performed and the bladder neck has been raised but the urethra is left as a functionless "drainpipe" the artificial urinary sphincter has a real place. Otherwise for this small group of women, often in their middle years, there are only the unacceptable alternatives of a lifetime of incontinence, an indwelling catheter, or a urinary diversion.

I have implanted sphincters in eight women, in all of whom conventional surgery had failed. Six are cured or improved, and one awaits evaluation. They would all agree that the sphincter was worth while. Whether the expense is justified when offset against the costs of continence garments, laundry bills, and patient morale and independence remains to be argued. I think it is.

While the number of women suitable for implantation remains small, it is appropriate to remember that had the initial bladder neck surgery been correctly selected many of these cases might not have come to implantation.

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- 1 Mundy A, Stephenson T. Selection of patients for implantation of the Brantley Scott artificial urinary sphincter. *Br J Urol* 1984;56:717-20.

Serum fructosamine concentration as a measure of blood glucose control in type I diabetes mellitus

SIR,—In their study of serum fructosamine concentration in type I diabetes mellitus Dr John R Baker and others (2 February, p 352) concluded that a single random serum fructosamine concentration provides a simple and reliable assessment of glucose homeostasis. In a previous paper they suggested that serum fructosamine estimation may provide a simple means of screening for diabetes mellitus.¹

Using identical methods in a kit supplied by Roche Products we measured serum fructosamine in 199 diabetic subjects and 97 non-diabetic controls. Our results are presented in the table. In comparison with the Auckland group we found higher values in both diabetic and control subjects, and while there was a significant difference between the groups as a whole ($p < 0.001$) there was considerable overlap between them. There was a strong positive correlation between serum fructosamine and glycosylated haemoglobin (affinity chromatography) concentrations in the diabetics ($r = 0.73$, $p < 0.001$) but not in 28 controls ($r = 0.39$, $p > 0.1$).

One of the proposed advantages of the assay was that commercial quality control sera could be used to standardise the method and thus ensure comparable results from different laboratories. The fact that 96 of our 97 controls had serum fructosamine,

Fructosamine values (mmol/l) measured by the same methods in two series of diabetes and controls

	Controls		Diabetics	
	Auckland n=30	Newcastle n=97	Auckland n=42	Newcastle n=199
Range	1.28-1.76	1.6-3.3	1.62-2.79	2.1-5.1
Median	1.52	2.5 (0.3)*	2.28	3.6 (0.8)*

*Median (SD).
Conversion: SI to traditional units—Fructosamine: 1 mmol/l = 25 mg/100 ml.

values within the diabetic range of the Auckland assay shows that this is not the case.

The claim that serum fructosamine estimations may be useful as a screening test for diabetes could not be substantiated in our study. The extensive overlap between the groups made it impossible to distinguish diabetics from controls in many cases despite the fact that less than 5% of the diabetics had a glycosylated haemoglobin value within the normal range, thereby excluding excellent diabetic control as the reason for the overlap.

We agree with Dr Baker and colleagues that the assay is cheap, simple to perform, and not time consuming. We provide evidence, however, that results from different laboratories are not comparable and dispute the usefulness of serum fructosamine concentrations as a screening test for diabetes.

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Rhabdomyolysis and acute renal failure in sickle cell anaemia

SIR,—I read with interest the paper by Drs S Devereux and S M Knowles (8 June, p 1707) relating to acute rhabdomyolysis causing renal failure in sickle cell anaemia. Severe sickling crisis after sepsis can by itself cause renal failure, due in part to the microvascular occlusion of renal capillaries by sickled cells.

Rhabdomyolysis does occur in some severe cases of sickle cell anaemia,¹ but whether it actually caused renal failure in the reported case is debatable. The most definitive confirmation of renal failure due to rhabdomyolysis would be in the demonstration of myoglobin in the urine or serum. This can be done either with a spectrophotometer or with acrylamide or gel electrophoresis and can be done on minute specimens.²

No report of myoglobin determination in the urine or serum was reported, although the authors note that the small amount of urine obtained by catheterisation contained some blood (?myoglobin) and protein.

Rhabdomyolysis resulting in increased creatine kinase activity probably was present as a result of the generalised tissue hypoxaemia after the patient's severe sickling crisis. The authors conclude that the rhabdomyolysis per se was the cause of the patient's renal failure, but without any biochemical evidence of myoglobinuria their conclusion is at best premature, if not erroneous.

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* * The authors reply below.—ED, *BMJ*.

SIR,—We agree that it is unfortunate that we were unable to look for myoglobinuria at the appropriate time. However, the other findings—namely, blood and protein on ward testing of the urine with few red cells on microscopy, considerably raised creatine kinase activity, and initial