CORRESPONDENCE

Correspondents are asked to be brief

Safety and Fibreoptic Bronchoscopy

SIR,—Though it is some weeks since I read your leading article on the possible dangers of fibreoptic bronchoscopy (31 August, p. 542) I have been reflecting ever since on a different type of hazard which may be more important than any of those you mentioned. I refer to the consequences of the dangerous assumption that bronchoscopists who are unable to use the "conventional" or "rigid" instrument, and who therefore have to rely on the fibreoptic instrument, are capable of performing under all circumstances an adequate bronchoscopic examination and all the manoeuvres which such an examination may involve. The fibreoptic bronchoscope has only two real advantages: (1) it can enable the operator to inspect the subsegmental divisions of the upper lobe bronchi, which may not be possible with optical telescopes of the conventional type, and (2) it can be passed into the peripheral bronchi of the middle and lower lobes and the lingular segment of the left upper lobe. Tumours can therefore be visualized in these normally inaccessible situations, and tissue taken for biopsy either with forceps or by the bronchial brushing technique. In these circumstances the fibreoptic bronchoscope is a valuable adjunct to examination with the conventional type of instrument, but the claim actively promoted by the manufacturers that it can be directed into fourth or higher generation bronchi to reach the site of a small peripheral bronchial carcinoma is, in the vast majority of cases, foolishly optimistic.

It is, of course, not difficult to visualize a bronchial carcinoma with a fibreoptic bronchoscope in lobar, segmental, or subsegmental bronchi provided broncial secretions are scanty and there is no bleeding, but even in these circumstances it is not easy to obtain an adequate biopsy with the tiny forceps provided, especially if the surface of the tumour is necrotic or if the forceps have to cut through intact mucosa to reach tumour tissue. When, as so often happens, there is even a moderate amount of mucus or pus in the bronchi or if mucosal bleeding occurs the fibreoptic instrument is virtually useless, because its small lens quickly becomes obscured and the facilities for suction, particularly when the tip of the bronchoscope is sharply angulated, often make it difficult to maintain a clear field of vision while a specimen for biopsy is being taken.

There have recently been great advances in the design of conventional bronchoscopic equipment as a result of which it is now greatly superior to fibreoptic equipment for inspection and biopsy of tumours in all lobar and segmental bronchi. Hopkin's telescopes (straight, right angle, and oblique) provide much better optical definition than can be obtained with fibreoptic systems, and forceps of ingenious design permit large specimens for biopsy to be taken under telescopic vision from all segmental bronchi, including the apical segmental bronchi of the upper lobes. Conventional bronchoscopic equipment can also be used for the removal of intrabronchial foreign bodies, which is, of course, completely impossible with fibreoptic instruments.

There is a widespread belief that fibreoptic bronchoscopy under local anaesthesia is an undisturbing procedure for the patient. This is by no means always the case. Local anaesthesia of the larynx, trachea, and bronchi is, at best, imperfect and unpredictable and there are few patients who do not experience some discomfort when even a fibreoptic bronchoscope is being manipulated in their air passages. Modern conventional bronchoscopes are now all designed for oxygen injection ventilation, which has eliminated virtually all danger from bronchoscopic examination under general anaesthesia, and there can no longer be any justification for continuing the barbarous practice of performing these investigations, whatever instrument is used, under local anaesthesia.

Bronchoscopy is a vitally important diagnostic procedure which should be carried out only by physicians and surgeons who are fully trained in the use of both conventional and fibreoptic instruments. It is not an investigation which can safely be left to the enthusiastic amateur equipped only with a fibreoptic bronchoscope. From the economic point of view also there is a strong case for restricting the supply of these bronchoscopes, which cost £3,500 each and are expensive to maintain, to centres where full facilities already exist for conventional bronchoscopy.—I am, etc.,

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Endoscopy Service for Dyspepsia

SIR,—Dr. R. J. Barnes and his colleagues (26 October, p. 214) have certainly proved the advantage of having an endoscopy service to supplement radiological investigation of dyspepsia in general practice. However, few details are given of their clinical assessment. This, as I am sure they will agree, is essential, for hiatus hernia and gall stones can be an incidental symptomless finding.

They sensibly classify mucosal abnormalities under normal findings. I fear that not every present-day endoscopist would be so

enlightened. Every new investigation carries an iatrogenic hazard, as illustrated in the early days of the E.C.G. when many were made cardiac neurotics because of findings now regarded as normal. This is a risk with endoscopy. Many patients suffer from nervous dyspepsia, helpful clinical clues being the presence of food intolerance, aerophagy, and obvious nervous symptoms elsewhere together with the absence of a positive pointing test and nocturnal pain. These, I think, are best served by a barium meal *x*-ray examination, complete reassurance with discussion of any problems, and a follow-up visit in one month with a view to discharge. Removal of gall stones results in many continuing with their symptoms, unless relieved by the placebo value of the operation. Referral for endoscopy puts a doubt in their minds. If, however, this is found to be normal they must be told the result and again reassured. This is not easy in practice. Outpatients, though told before being driven home, may not remember because of amnesia from diazepam. They may fail to contact their general practitioner. We now write directly to the patient and send a copy of the letter to his doctor. Worst of all is the doubt cast by reporting mucosal abnormalities such as gastritis. Neither the general practitioner nor one's colleagues in other specialties may know its significance. Gastritis is nearly always symptomless and common in normal people who never have dyspepsia, and patients with pernicious anaemia have gastric atrophy and do not know it. Endoscopy is now being done by junior staff whose clinical acumen may lag behind their technical competence, and they may be unaware of the work done by the previous generation of endoscopists.

It is always exciting and more rewarding to "find something." Redness of the gastric and duodenal mucosa may indicate circulatory and not inflammatory changes. Histological reports must be received with scepticism as, for example, the mucosa of the duodenum may contain large numbers of round cells in health and assessment of them is highly subjective. Yet this is the main criterion for diagnosing duodenitis. I was very impressed when seeing Tom, the subject with the gastric fistula. His gastric mucosa would become oedematous and red when he was made angry by his investigators, Wolf and Wolff.[1] Some of our patients, in spite of diazepam, feel a trifle unhappy when the duodenoscope is in position. Perhaps the mucosal changes may then be due to an "angry stomach"—or duodenum.

Finally, the endoscopist is often called in merely as a technician and not asked to give a clinical opinion. The report of the endoscopy must then be clear and definite. This is no problem when an ulcer or carcinoma is found but it is easy to be non-committal when describing mucosal abnormalities. These, if thought incidental, must be clearly reported as being so. Otherwise our nervous dyspeptics will spend their lives as gasrtic cripples forsaking the pleasures of the table, being convinced of the organic nature of their symptoms because of the label of gastritis.—I am, etc.,

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1 Wolf, S., and Wolff, H. G., *Human Gastric Function*. London, Oxford University Press, 1947.

Samples for Hepatitis B Antigen Testing

SIR,—The risks of hepatitis to laboratory personnel handling infected blood and blood products are well recognized.[1 2] Despite a local circular and the publication of the Public Health Laboratory Service monograph on laboratory hazards[3] we were disappointed to find that of 101 specimens received in the past fortnight, no fewer than 37 were sent in unsuitable containers. As shown in the table, the containers used fall into two groups.

Group 1, hazardous containers:	
Glass flat-bottomed thin-walled tube with screw cap	17
Plastic thin-walled tube with push-on cap ...	9
	26
Group 2, unsatisfactory containers	
Plastic universal containers with plastic cap	10
Glass universal container with plastic cap	1
	11

Containers in the first group carry the greater hazard and their use probably results from a failure of the ward staff to appreciate the dangers of blood specimens. Spillage of blood from a jaundiced patient on the ward can create considerable alarm among the staff; they could helpfully refrain from putting laboratory staff at similar or greater risk by sending blood in containers with fragile walls and/or snap-on lids.[4]

Containers in the second group are unsatisfactory in that the cap may become loose or the clot may fail to retract adequately (it has then to be separated by centrifugation, an additionally hazardous procedure). The use of these probably results from bulk purchasing by hospital supply officers. With the rising cost and scarcity of oil-based products, of which polystyrene is one, we are surprised at how many hospitals still use them. We urge a strong campaign on the part of ward staffs to ensure that undamaged, thick-walled, glass containers with metal screw caps and rubber liners (standard 1-oz universal and ¼-oz bijou bottles or their metric equivalents) are available for sending potentially or actually infectious specimens to the laboratory. Support for such a campaign may be found on p. 11 of the P.H.L.S. monograph.—We are, etc.,

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1 Byrne, E. B., *Journal of the American Medical Association*, 1966, **195**, 362.
2 Watson, *et al.*, *Lancet*, 1973, **1**, 985.
3 Collins, C. H., Hartley, E. G., and Pilsworth, R., *The Prevention of Laboratory Acquired Infection*, P.H.L.S. Monograph Series No. 6 London, H.M.S.O., 1974.
4 Working Party on Health Hazards in Laboratories, *Safety in Pathology Laboratories*, p. 57. London, Department of Health and Social Security, 1972.

Sex Difference in Cardiac Actions in Prolactin

SIR,—Earlier this year (6 April, p. 27) we demonstrated that prolactin in a concentration of 50 mg/ml had chronotropic and inotropic actions and could produce dysrhythmias in perfused male rat hearts. This concentration of prolactin is in the range found in human plasma during exercise and surgery and after myocardial infarction.[1-3]

During the past year we have been carrying out similar experiments on perfused rabbit hearts. The results will be reported in full elsewhere but are of such potential importance that we should like to record our conclusions in a general medical journal. Our findings are as follows: (1) In male rabbit hearts, as in rats, 50 ng/ml prolactin can have inotropic and chronotropic effects. These effects show a clear seasonal variation, being much more marked during the autumn and winter than during the late spring and summer. (2) Both the chronotropic and inotropic effects can be abolished by propanolol. (3) Prolactin has no effects at any season in hearts taken from female rabbits or from prepubertal animals of either sex.

It is unwise to extrapolate from animal experiments to humans but in view of sexual and seasonal differences in the occurrence of myocardial infarction these findings may be worthy of further exploration.—We are, etc.,

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1 Frantz, A. G., Kleinberg, D. L., and Noel, G. L., *Recent Progress in Hormone Research*, 1972, **28**, 527.
2 Friesen, H., *et al.*, in *Lactogenic Hormones*, ed. G. E. W. Wolstenholme and J. Knight. London, Churchill Livingstone. 1972.
3 Horrobin, D. F., *et al.*, *Lancet*, 1973, **2**, 1261.

Primary Medical Care

SIR,—"The fundamental differences between primary medical care and traditional general practice are its use of a team of health professionals rather than the solitary figure of the family doctor. . . ." This fatuous observation in the opening paragraph of your leading article (19 October, p. 126) will have given offence to many general practitioners. General practice *is* primary care and a good deal more besides.

Do you give the impression of the solitary family doctor bumbling along alone with your tongue in your cheek? It is known full well that a major part of so-called primary care is undertaken by general practitioners working together in groups from purpose-built premises with attached nurses and health visitors, aided by pathology and *x*-ray facilities and with consultant aid when necessary. These are very competent people with a depth of experience providing a very high standard of care in the fullest meaning of the word. They do not regard themselves as amateurs and their cost effectiveness is without parallel. Who then are these teams of health professionals?

I cannot believe that those of us engaged in family practice would accept either of the assumptions you quote from Professor A. D. Roy's committee's report[1] that there is a continuing trend for general practitioners to form large groups and to work from health centres with the emphasis likely to move towards preventive programmes . . . and all that. Our experience of the reorganization of the welfare services on a team basis has not impressed us with any improvement in efficiency.