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 gastric 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 hazards³ 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 ½-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 at 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 propranolol. (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 report¹ 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.