emergency should be undertaken by an ear, nose, and throat surgeon familiar with all the problems and pitfalls of this condition. Only in this way will unnecessary use of the rigid oesophagoscope be avoided in many cases.

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Anticardiolipin antibodies in pregnancy

SIR,—Dr Graham Hughes (11 August, p 339) draws attention to the increasing evidence that the presence of antiphospholipid antibodies appears to correlate with certain pregnancy problems. We have been making a preliminary analysis of the outcome of pregnancies associated with anticardiolipin antibodies defined on the basis of so called biologically false positive tests for syphilis. Tests based on an anticardiolipin technique have been standard for many years.

We have reviewed the case records which we have been able to trace of women in the Yorkshire region who had positive anticardiolipin tests in pregnancy not attributable to syphilis between 1970 and 1983. Our preliminary results show that in 103 pregnancies reaching maturity (28 weeks) there were three stillbirths, one neonatal death, and one early infant death. The same women had 108 further pregnancies going to maturity on which information was available. There were three stillbirths, two neonatal deaths, and two infant deaths in this group. Complete information is not so far available on the incidence of abortion.

"False positive" anticardiolipin tests for syphilis are usually ignored by obstetricians, but these data suggest that they are associated with a high risk of death of the baby. They should be regarded as pointing to an immunological disturbance which requires detailed investigation.

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Smoking and insulin absorption

SIR,—Dr I Mühlhauser and others (23 June, p 1875) have suggested on the basis of changes in circulating insulin concentrations in non-diabetic subjects that "diabetic patients need not consider smoking a cigarette a relevant factor influencing insulin absorption from the subcutaneous tissue." We consider, however, that the effect of smoking on subcutaneous insulin absorption is as yet undecided.

Dr Mühlhauser and others did not examine insulin absorption in diabetic patients, which may be particularly important since there is increasing evidence that vascular reactivity differs between diabetic and non-diabetic subjects. In diabetic patients several studies have shown impaired responsiveness to various vasodilator stimuli[1-4] and in animals with experimental diabetes vascular responses to vasoconstrictor agents may be exaggerated.[5 6] It is therefore possible that nicotine might induce more intense vasoconstriction in diabetic than in non-diabetic subjects and, as subcutaneous insulin absorption is known to depend on local blood flow,[7 8] impaired absorption in diabetic but not in non-diabetic subjects. Indeed, Klemp *et al*[9] using radioiodinated insulin tracer techniques found that cigarette smoking reduced subcutaneous insulin absorption in diabetic patients, presumably through peripheral vasoconstriction.

Dr Mühlhauser and others criticise the controversial indirect radioiodinated insulin tracer technique mainly because it assumes that degradation of insulin at the subcutaneous injection site is negligible. The paper cited by Dr Mühlhauser and others as providing ample evidence for appreciable local insulin degradation[10] mentions this subject only briefly; the data provided relate to the enhancement of subcutaneous insulin absorption seen when insulin is injected with the protease inhibitor, aprotinin, which they assume to act by inhibiting proteolytic insulin destruction at the injection site. There is evidence that in most insulin-dependent diabetic patients degradation of insulin at its subcutaneous injection site is minimal. For example, two studies have found that intravenous and subcutaneous insulin requirements are comparable in patients with average daily insulin dosages,[11 12] suggesting little or no wastage of subcutaneously injected insulin. Even in patients with brittle disease with high subcutaneous insulin requirements insulin degrading activity of subcutaneous tissue was not greater than in stable control patients with normal requirements.[13] A possible exception is the very rare group with subcutaneous insulin resistance but normal intravenous insulin sensitivity, although increased insulin degrading activity in subcutaneous tissue has been shown in only two of the 20 cases so far described.[14 15] The action of aprotinin in enhancing subcutaneous insulin absorption, previously taken to be evidence in favour of an important role for local insulin degradation, could instead be due to an unrelated effect such as stimulation of local blood flow.[16]

At present there is no satisfactory method for measuring subcutaneous insulin absorption in man. The direct method used by Dr Mühlhauser and others is subject to criticism as circulating insulin concentrations reflect not only entry of injected exogenous insulin to the circulation but also any endogenous insulin secretion and clearance of insulin from the bloodstream. Moreover, the difficulty in interpreting circulating insulin concentrations in insulin treated patients with insulin binding antibodies may explain why Dr Mühlhauser and others confined their study to the simpler but much less relevant case of non-diabetic subjects.

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Home care for patients with suspected myocardial infarction

SIR,—Dr J M Rowley and others (18 August, p 403) conclude from their study of home care of patients with myocardial infarction that in Nottingham at least home care did not make any substantial impact on the need for hospital services. It would be interesting to see a similar study conducted in a more rural environment where general practitioners were not able to delegate their out of hours responsibilities to deputising services. I suspect that such general practitioners would show considerably more enthusiasm for home care than their Nottingham counterparts.

Where I take issue with Dr Rowley and others is when they conclude: "If general practitioners do not consider home care to be an acceptable form of management for patients with suspected myocardial infarction, then there is little point in their playing any part when patients develop suspicious symptoms." Instead they suggest that the general public should be encouraged to go directly to hospital without contacting their general practitioner and have embarked on a programme of education for the Nottingham public to this effect. Should such a policy of public re-education succeed I fear for the consequences.

Dr Rowley and others seem to assume that the public can be relied on to diagnose myocardial infarction with a reasonable degree of accuracy. This certainly does not accord with my experience as a general practitioner providing 24 hour cover for my patients without the aid of a deputising service. I envisage ambulance services and casualty departments swamped with patients suffering from oesophagitis, angina, vasovagal attacks, musculoskeletal pain, and hysteria. Nor will this waste of resources stop here. These patients will generate unnecessary admissions and unnecessary referrals to medical outpatient departments. Extra electrocardiogram technicians and radiographers may need to be employed to assist in the investigation of these patients before they are discharged home. Furthermore, if self referral is to be the order of the day for myocardial infarction many patients will reasonably assume that it is equally appropriate for other acute condition such as asthma, abdominal pain, convulsions, syncope, and threatened abortion, which often can be dealt with by the general practitioner without referral to hospital.