lactic measures. The article gives only brief mention of the Cardiff trial using dextran 70 (19 April, p 109), which was specifically designed (in relation to homogeneous groups, double-blind assessment, and accurate documentation) to avoid some of the problems of the multi-centre heparin trial raised by your leading article. Since it was shown that dextran gave an equal degree of protection against serious thromboembolic complications, logistic considerations are important. Hence where shortage of nursing staff makes the thrice-daily heparin regimen difficult to maintain dextran is a logical alternative, since it makes no extra demands on the Health Service.

The statement, "perioperative bleeding in the patients given dextran was not a problem," is not a true summary of our findings, which in fact were again very similar to experience with subcutaneous heparin. That is, while no significant increase in overall bleeding may be seen in a large series clinical experience strongly suggests that occasional patients bleed excessively with both regimens. Failure to recognise this is likely to lead to either method being abandoned prematurely, and clearly there is still need for the ideal prophylactic measure to be developed. However, the recommended support by the Medical Research Council for a clinical trial comparing heparin with dextran would most likely be unprofitable. When trials of 800 and 4000 patients give such similar results for the two methods an astronomical number of patients would need to be studied to show any small difference which may exist.

L E HUGHES
H CAMPBELL

Welsh National School of Medicine,
Cardiff

Calf haematoma: a new sign

SIR,—Physical signs are often as valuable as invasive investigations. Two patients showed the interesting crescent sign reported by Dr D A Tibbutt and Mr A J Gunning (26 October 1974, p 204). Both cases had a calf haematoma and also a systemic disorder.

A lorry-driver, aged 28, developed swelling and pain in his right knee five days after having a sore throat. His right ankle became swollen a week later and a crescentic bruise with sparse purpura appeared below the lateral malleolus. The bruise and oedema disappeared 10 days later, but he then had anaphylactoid purpura on his legs and buttocks. His blood pressure, blood count, urine, plasma proteins, and chest x-ray picture were normal. His ECG did not show the changes described in more active cases of the condition.¹ In this case the calf ecchymosis was aggravated, if not caused, by the periangitis of Schönlein's purpura.

A man, aged 53, noticed some small red spots on both ankles. They persisted for four weeks. Two months later he still had one red spot on his right shin, with right-sided ankle oedema and crescentic bruising below the lateral malleolus. He had stopped smoking 30 years previously after recovering from malaria, hepatitis, and infectious mononucleosis. He had no varicose veins. His haemoglobin, ESR, autoimmune tests, and chest x-ray picture were normal. His white blood count was $4500 \times 10^6/l$ with 12% of eosinophils. The bruise and swelling resolved in two weeks, and the eosinophil count was then 1% only. The skin lesion healed in three weeks. Tissue for biopsy was not taken. He developed a large left-sided pleural effusion nine months later, however, and biopsy of a lymph node showed lymphocyte-depleted Hodgkin's disease. The erythema nodosum-like rash and later calf

haematoma were probably early manifestations of the lymphoma.

The crescent sign adequately differentiates between calf haematoma and deep vein thrombosis, but an underlying medical condition needs also to be excluded. Earlier treatment of case 2 would have been possible if case 1 had been seen first.

GERALD A MACGREGOR

St Luke's Hospital,
Guildford

¹ MacGregor, G A, and Vallance-Owen, J, *Lancet*, 1957, 2, 572.

Use of bacteriological investigations by general practitioners

SIR,—Dr D J Rodger's letter (4 October, p 42) questions the yield from general practitioner bacteriological investigations. The results from our pilot study, undertaken earlier this year, on specimens of vaginal discharge from two practices may prove of interest.

Varying types of swabs and slides from 20 women with vaginal discharge were taken by two of us in practice and examined at the Middlesbrough General Hospital. Bacteriological examination of the material from dry swabs showed one patient with trichomonas, three with monilia, and two with pathogenic organisms from the 20 specimens submitted. Swabs from the same 20 patients sent in Stuart's transport media, however, showed three patients with trichomonas, eight with monilia, five showing pathogenic organisms, and the remaining four with normal flora. Reports on slides from these patients sent to the cervical cytology laboratory yielded three trichomonas and six monilia infections.

We consider these results prove the need to use transport media for vaginal discharge specimens submitted from practice.

P MORTIMER
GEOFFREY STOUT
D S STRACHAN

Middlesbrough, Cleveland

Laparoscopy explosion hazards with nitrous oxide

SIR,—We were intrigued by the letter from Professor J S Robinson and others (27 September, p 764) concerning explosion hazards during laparoscopy with nitrous oxide (N_2O). Several points, however, need to be seen in perspective. Diathermy is used in only a small proportion of laparoscopies. For example, in this hospital sterilisation by tubal diathermy has accounted for less than 30% of over 3000 laparoscopies performed in the last three years.

Our reasons for preferring N_2O to carbon dioxide (CO_2) have already been published.¹ CO_2 insufflation during laparoscopy is not as innocuous as Professor Robinson and his colleagues imply—indeed cardiac arrest has occurred. We know of no entirely satisfactory way of countering the "pharmacological effects" of CO_2 in this situation. The use of a gas of high water solubility for laparoscopy may be more relevant than is generally supposed. During hysteroscopy we found a significant difference between N_2O and CO_2 with respect to possible pulmonary em-

bolisation.² In this situation the difference in water solubility of N_2O and CO_2 may be the crucial factor. Even during laparoscopy, however, intravascular administration of the insufflating gas is not unknown. The use of gases of low water solubility, therefore, will almost certainly lead to tragedy.

The Birmingham findings therefore pose a dilemma. N_2O is safer than CO_2 for laparoscopy with respect to detrimental cardiovascular changes. The use of diathermy may alter the balance, with regard to an explosion, in favour of CO_2 . It seems, therefore, most important that gas measurements should be carried out during laparoscopy to establish whether explosive mixtures of hydrogen and methane are indeed present in the abdominal cavity. Perhaps Professor Robinson and his colleagues are in a position to provide this information so that a reasoned judgment may be made of the risks.

I M CORALL
J A ELIAS
LEO STRUNIN

Departments of Anaesthesia and Obstetrics and
Gynaecology,
King's College Hospital,
London SE5

¹ Corall, I M, et al, *British Journal of Anaesthesia*, 1974, 46, 925.
² Hulf, J A, et al, *British Medical Journal*, 1975, 1, 511.

Management of acute asthma

SIR,—Your leading article (11 October, p 65) is remiss in not mentioning the role of subcutaneous adrenaline in the management of acute asthma. There can be little doubt of the ease with which subcutaneous adrenaline can be given to young persons compared with intravenous drip transfusion and repeated intravenous doses of hydrocortisone or slow intravenous injection of aminophylline. Because of ease in administration and lack of frequent and severe side effects, subcutaneous adrenaline should be the initial treatment of choice in young patients with acute asthma.

F HARRIS

Alder Hey Children's Hospital,
Liverpool

NHS superannuation: lump sum

SIR,—From 1972 a married man receives 3/80ths towards his lump sum for each year of service but prior to 1972 1/80th. The employee pays 6% per annum, which is the same contribution as before 1972. Could someone please tell me why we are given the "privilege" of buying 2/80ths for each year before 1972 instead of receiving what is already our due?

F J FLINT

Sheffield

* * The Secretary writes: "Despite the strongest representations from the BMA the Secretary of State for Social Security has refused to pay the full unreduced lump sum retiring allowance for years of service before 25 March 1972. The "privilege" of buying the 2/80ths was offered instead. It remains the view of the BMA that the full lump sum should have been paid for all service without having to "buy" it.—ED, *BMJ*."