

parent. In your leading article (17 August, p. 430) you express an opinion that was discarded by most ophthalmologists in Britain many years ago. Your support for this delayed surgery is perpetuating an idea which results in many children not developing any form of binocular vision and is performing a grave disservice to squinting children.—I am, etc.,

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### Tuberculous Lymphoedema

SIR,—In their report of two cases of tuberculous lymphoedema (28 September, p. 786) Dr. Shaista Hoda and Professor S. M. Rab describe this condition as rare. That this is not everywhere the case is shown by Professor Anomah Ngu,<sup>1</sup> who reported from Ibadan a study of 65 patients with chronic lymphoedema investigated by lymph node biopsy, lymphangiography, examination of blood films for microfilaria, skin tests for filarial antigens, and the Heaf and Frei tests. In 25 of his patients the lymphoedema was caused by tuberculous adenitis and in 30 by chronic pyogenic infection. In no case was *Wucheria bancrofti* found.

Though I have no records available, my own experience of patients with elephantiasis of the leg or scrotum seen in Northern Ghana was in accordance with these findings.—I am, etc.,

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<sup>1</sup> Ngu, V. A., in *Companion to Surgery in Africa*, ed. W. W. Davey. London, Livingstone, 1968.

### Price of Prostatectomy

SIR,—Since a substantial proportion of the endoscopic prostatectomies (and a lesser proportion of the open prostatectomies, for I am an enthusiastic resectionist), reported by Mr. Argyrou and others (24 August, p. 511) were in fact under my care, I feel particularly entitled to comment both on the article itself and on the letters from Mr. R. S. Murley and Mr. P. F. J. Hickinbotham (21 September, p. 739).

First of all I deprecate the concept that a short postoperative stay is necessarily a good thing. Patients should stay in hospital as long as they need, and I am miserably aware that most of ours are sent home far too early. A mean figure of eight days for an admission which includes a prostatectomy is much too small and, rather than attracting praise, should be seen as a lamentable failure of the National Health Service to provide the patient with an adequate service. Furthermore, I am not anxious to be seen by my patients or my employing authority as a purveyor of cheap prostatectomy. I very much hope that as a trained urologist I have more to offer them. Indeed some urologists are indifferent resectionists, as Mr. Murley has found out; they are nonetheless important or valuable people for that.

The essential difference between endoscopic and open prostatectomy to the patient is that the former does not involve an abdominal incision and the consequent postoperative pain. This simple and obvious fact is often overlooked but certainly seems to place the onus upon the open prostatec-

tomist to demonstrate that his operation is better in cases where either procedure is appropriate. No attempt to do this has been made by your correspondents.

Lastly, Mr. Hickinbotham has his horse and cart in the wrong order. Those urologists who offer open prostatectomy to the patient with a large gland and endoscopic prostatectomy to those with a small gland often observe that the open operation is better. The reason is that patients with a large gland have a more favourable condition to treat than those with a small gland and tend to do better whether they are managed by endoscopic or open prostatectomy. Let Mr. Hickinbotham resect a little faster and tackle the larger glands. He will find himself, and his patients, most pleasantly rewarded.—I am, etc.,

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### "Lost Threads" with Intrauterine Devices

SIR,—This common problem is handled in a number of ways by gynaecologists and family planning doctors, with varying success and often some discomfort to the patient. The diagnosis is frequently in doubt; some are cases of unrecognized expulsion and some of in situ pregnancy in which the threads of the device have been drawn up by the enlarging uterus. More rarely the device may have perforated the uterus, with or without subsequent pregnancy. Most commonly the cavity of the non-pregnant uterus contains both the device and its threads owing to alteration of the position of the former.

The risk of early pregnancy limits the usefulness of x-rays, and even if two views are taken they may fail to establish the true location of the device. We have found that in expert hands ultrasonic B-scan is preferable as the uterus can be outlined in relation to the device. But the method described below is now preferred as the first step in many cases where pregnancy is not suspected—ideally during a period—as diagnosis and treatment can be virtually simultaneous.

In this department we have recently been using a 4-mm disposable vacuum aspiration curette (Rocket) for biopsy of the endometrium and have found that it is also extremely useful for bringing out the missing threads of intrauterine devices. After bimanual examination and cleaning of the cervix through a duck-billed speculum a single-toothed tenaculum is applied and the uterus sounded. The adaptor on the aspiration catheter is fitted to the small specimen bottle provided and connected to pressure tubing linked to any appropriate source of vacuum. We have found the R4.910 (Rocket) hand pump very satisfactory, operated by an assistant. The soft plastic catheter is then introduced via the cervix to the top of the uterine cavity and suction applied (approximately 50 cm H<sub>2</sub>O is sufficient). The catheter is then withdrawn with the suction maintained. The thread (or threads, depending on the type of device) is usually brought out at the first attempt. The device should then be removed as its position is likely to have been disturbed, and a replacement device can be inserted.

The method appears to cause much less discomfort than alternative outpatient procedures using exploratory forceps or endometrial biopsy curettes. However, in nullipara and certain other patients in whom dilatation (to Hegar 4 only) may be required local anaesthesia of the cervix by injection of 1% lignocaine plus adrenaline at the 12, 4, and 8 o'clock positions may be indicated.

The technique as described here is rapid and rarely requires the lithotomy position or any form of anaesthesia. The risk of

damage to the uterus is especially low as the catheter used is soft and flexible. The apparatus is simple, presterilized, and portable and requires no electric power. The method may thus be considered for use by trained personnel in the normal family planning clinic context.—We are, etc.,

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### Fatal Puerperal Septicaemia

SIR,—Reports to the Public Health Laboratory Service cited by you (17 February 1973, p. 428) illustrated the tendency of group B streptococci to act as serious pathogens in women after delivery and in newborn infants. It has been suggested that all pregnant women in the last trimester should be screened for the existence of group B streptococci in the vagina and the carriers adequately treated,<sup>1</sup> but the justification for this recommendation has subsequently been questioned.<sup>2</sup> The carrier rate of the more pathogenic streptococci—for instance, those belonging to group A—is probably much below that of group B streptococci, but the former should not be omitted from the current discussion. The clinical course of an infection with haemolytic streptococci often includes septic shock with coagulopathy. Disseminated intravascular coagulation has been described as a consequence of an overwhelming infection,<sup>3</sup> but a generally increased fibrinolytic activity may also play an important role in the pathogenesis of the clinical syndrome, as exemplified by the following case.

A 24-year-old healthy primigravida was admitted to the delivery ward in the 40th week of an uneventful pregnancy after spontaneous rupture of the membranes. After eight hours' normal labour she was delivered with a vacuum extractor of a child with an Apgar score of 9. During the labour the patient's temperature rose to 38°C but fell to normal after salicylate administration. Twelve hours after delivery the patient became ill, vomited, and had a rising temperature and tachycardia. Within one hour the clinical picture of septic shock was evident. The platelet count was 90,000/mm<sup>3</sup>, the AHF antigen (immunochemical method) was strongly elevated (1,090%), while AHF activity was reduced (42%). The fibrinogen level was low (0.15 g/100 ml) and Owrens P and P (65%) and factor V (23%) were both markedly reduced. The patient had a high fibrinolytic activity in plasma (Schneider's test), an extremely high level of fibrinogen degradation products (end products: D and E) in the serum (1,000 µg/ml), a positive ethanol gelation test, and low antitrypsin III (44%) and α<sub>2</sub>-macroglobulin (30%) levels. An extremely low value of factor XIII (3 FSF units/ml plasma) was obtained. The laboratory tests, which were available only in part at the acute stage, thus showed a strong activation of both the coagulation and fibrinolytic systems.

The following treatment was given: synthetic plasma expander (Hemacel), plasma, fresh blood, and high-molecular-weight (74,000) dextran, 0.01 g/kg body weight tranexamic acid, 5 g ampicillin, 250 mg hydrocortisone, and 80 mg betamethasone. The patient's condition deteriorated rapidly, she went into coma, became excessively acidotic, and an adequate blood pressure could not be maintained. She died 19 hours after delivery. At necropsy marked acute inflammation was found in the uterine wall with beginning abscess formation. Fibrin thrombi were present in the vessels of the lungs and the kidneys, and the surfaces of the abdominal organs showed a tendency to generalized bleeding. Abundant growth of haemolytic streptococci group A, sensitive to penicillin, was obtained in cultures from the vagina, uterus, liver, and spleen.

The condition of the baby was initially satisfactory but deteriorated at 12 hours age with the

appearance of multiple cutaneous infections. Blood culture and culture from the pustules revealed haemolytic streptococci group A. The baby recovered after treatment with ampicillin.

Disseminated intravascular coagulation has been found to occur in connexion with septic shock.<sup>4</sup> Both thromboplastic material and fibrinolytic activators are most probably released as a consequence of endothelial damage to bacterial toxins.<sup>5</sup> In most such cases therefore both the coagulation and fibrinolytic systems will be activated. In the present case the coagulation system was activated as shown by the decreased platelet count and the decreased levels of prothrombin, fibrinogen, antithrombin III, and  $\alpha_2$ -macroglobulin. Soluble fibrin monomers were demonstrated and fibrin thrombi were found post mortem in the pulmonary and renal vessels. Extremely high levels of AHF antigen have been found in conditions with severe tissue damage.<sup>6</sup> A discrepancy between the antigen level and the AHF activity of the same degree as in the present case has been demonstrated in patients with signs of an activated coagulation system during pregnancy<sup>7</sup> and has been proposed as an early sign of a pathologically activated coagulation system.

The patient had, however, also signs of a markedly activated fibrinolytic system with increased fibrinolysis, extremely high levels of fibrinogen degradation products of low molecular weight, indicating complete degradation of fibrinogen, and a very low factor V level. Alpha<sub>2</sub>-macroglobulin binds both thrombin and plasmin, and very low levels are seen when both these proteolytic enzymes are present, as in this patient. Because the patient showed an activated fibrinolytic system, no tranexamic acid was administered after the first dose. She was given dextran in order to prevent further platelet aggregation and fibrin deposition, and freshly frozen plasma and fresh blood were given to replace the coagulation factors.

The vaginal flora in pregnant women sometimes contains haemolytic streptococci. These are usually commensals, but a few groups of streptococci are known to be able to cause malignant infections in puerperal and neonatal subjects. Group B streptococci are the most commonly encountered in the vagina, but the question whether pregnant carriers should generally receive preventive penicillin treatment is not yet settled. On the other hand, during late pregnancy the presence in the birth canal of haemolytic streptococci of group A, which more consistently occasion severe infections, is in our opinion of much graver significance. The finding of group A streptococci in women before parturition should be seriously considered as an invariable indication for proper preventive penicillin treatment.—We are, etc.,

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1 McCracken, G. H., *Journal of Pediatrics*, 1973, 82, 703.

2 Ledger, W. J., *American Journal of Obstetrics and Gynecology*, 1974, 118, 296.

3 Jewett, J. F., *New England Journal of Medicine*, 1973, 289, 43.

4 McKay, D. G., *Disseminated Intravascular Coagulation: an Intermediary Mechanism of Disease*. New York, Hoeber Medical Division, 1965.

5 Nilsson, I. M., *Haemorrhagic and Thrombotic Diseases*. London, Wiley, In press.

6 Holmberg, L., Nilsson, I. M., *Scandinavian Journal of Haematology*, 1974, 12, 221.

7 Nilsson, I. M., et al., *Acta Obstetrica et Gynecologica Scandinavica*, In press.

### Cervical Plasma Cell Population in Infertile Patients

SIR,—In their article on increased IgA-containing plasma cells in the cervix of infertile patients Mr. R. B. Hutcheson and his colleagues (28 September, p. 783) make no mention as to whether they found a relationship with the result of the postcoital (Sims) test and/or invasion (Kurrock-Miller) test.

In this clinic we find a definite group of patients who evince "cervical hostility" as judged by these tests. It would be of great interest to know whether it is this same group of patients who have an increase in plasma cells containing IgA.—I am, etc.,

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### Gaps in Medical Research

SIR,—Last year the Board of Science and Education of the B.M.A. set up a special panel to study gaps in medical research, with particular reference to common and everyday maladies, and I was appointed to chair this multidisciplinary group.

We are interpreting our terms of reference broadly and are interested in prevention as well as cure, and in some aspects of human behaviour in relation to health as well as common problems in the delivery of care. In enabling us to fulfil our task we feel it would be helpful to have views from members of the professions engaged in the health services as well as from consumers of medical care. In particular, we would like to hear of problems which, while they do not necessarily threaten life, are serious in the sense that they are common and cause inconvenience or pain and into which medical research is needed.

Evidence from individuals or groups would be most welcome and should be sent to the Secretary of the Board of Science and Education of the B.M.A., B.M.A. House, Tavistock Square, London WC1H 9JP.—I am, etc.,

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### "Continuing Clinical Responsibility"

SIR,—Unlike my colleague Mr. F. A. Howard (5 October, p. 49) I found it impossible to complete the ill-prepared questionnaire I received from the Joint Working Party on the Terms of Employment of Senior Hospital and Medical and Dental Staff. I would, however, like to make some comments from the point of view of a senior consultant about the contents of his letter.

The senior hospital staffs in the N.H.S. are the only group of doctors who are not paid the "rate for the job." After a long and arduous training a doctor is appointed as a consultant in charge of patients. One would assume that now he was fully trained, but this cannot be the case as he is paid at the beginning of his appointment nearly £3,000

a year less than when he is senior. No trade union would accept lower pay for its skilled workers just because they are younger; why do we accept it? At a recent meeting in the south of England I was told that it was now impossible for a young consultant to buy a house in the district as he did not earn enough to get a mortgage. It was suggested that an approach was to be made to the hospital to provide caravans in the hospital grounds for the young consultants to live in. I find this state of affairs not only unjust but almost unbelievable, and one wonders just how long we are going to tolerate it.—I am, etc.,

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SIR,—The questionnaire recently sent to consultants from the Joint Working Party on consultants' terms and conditions, with the blessing, albeit qualified, of our own representatives, must surely set the alarm bells ringing. The potential utilization by the Government of the statistics thus collected could well be as follows: (1) average number of "out of normal hours" worked per week = X; (2) suggested appropriate total average remuneration = R; (3) therefore  $R - (X \times F) = \text{Basic Salary}$  where F = the rate per hour for "additional work."

Clearly the result, essentially a system of piecework overtime, would be that those specialties with a large element of "out of normal hours" work or time "on call" would achieve a level of remuneration which might be just acceptable, but many, perhaps the majority, would attract no more than an unacceptably low basic salary. There will be those who will argue that specialties with a large "out of normal hours" commitment should indeed attract a higher level of remuneration than others, but there are less obvious factors perhaps only immediately appreciated by the practitioner of any given specialty.

Personally, I think I would feel physically and mentally exhausted after a "normal" day's work with psychiatric patients, for example, and speaking as a radiologist it is arguable that a high concentration of work load within the working day, with perhaps 100 or more signed clinical decisions, combined with potential radiation exposure and the physical work of modern special techniques is at least as demanding as the routine in other specialties. It is to be noted, also, that even outside teaching centres the "major" specialties do generally have some level of supporting staff, whereas in other specialties this is unknown and the consultants perforce carry every last item of the work load of the unit till the day they retire. It is suggested that we must be wary of a "divide and conquer" policy and concentrate on the objective of a realistic flat rate of remuneration for each career grade in the hospital service, leaving other features of each specialty to determine which an individual chooses to pursue.

The arguments against "piecework" are too well known to require repetition here, but it is particularly worth noting the implications in relation to the existing pension system, whereby any practitioner on basic salary plus "piecework" can optimize his pension only by working hardest in one of his last three years.—I am, etc.,

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