Promiscuity and infertility

SIR,—Your leading article (30 August, p 501) notes the increase in salpingitis after gonococcal infection. However, *Neisseria gonorrhoeae* is still difficult to isolate in salpingitis. A recent survey at a South Wales hospital has shown 29% of salpingitis cases (excluding post-abortal) to be gonococcal.[1] This figure was obtained in a gynaecological unit possessing the organisation, equipment, and expertise for diagnostic precision which, you rightly say, is often lacking. Two other hospitals with the same catchment area but without the same facilities had figures of 3% and 1%, which are probably representative of most hospitals.

The bacterial aetiology of non-gonococcal salpingitis is poorly understood. Many cases probably represent infection by opportunist bacteria of tubes already damaged by previous infection, either gonococcal or from adjacent pelvic viscera. Secondly, chlamydiae and T-strain mycoplasmas are becoming increasingly recognised as major causes of non-specific urethritis in males, which is now diagnosed more frequently than gonorrhoea.[2] The equivalent infection in the female is difficult to identify and may be represented by non-gonococcal salpingitis. If so, the common treatment of non-gonococcal salpingitis with penicillins such as ampicillin is irrational, as these organisms are insensitive and respond best to tetracyclines. Inappropriate antibiotic therapy would explain the tendency for relapse in this condition.

A clue to the cause of infection may be provided by inquiring about urinogenital troubles in sexual contacts. Patients do not usually volunteer this information unless specifically asked. The venereologist should be consulted more often by his gynaecological and surgical colleagues in the investigation of patients with possible salpingitis, as he possesses the necessary clinical background to utilise correctly the bacteriological diagnostic techniques available.

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Hibiscrub in acne

SIR,—An advantage of the phenolic type of disinfectant is its compatibility with soap, which enables formulations to be prepared which cleanse and disinfect simultaneously. Reports of dermal absorption of hexachlorophane[1-4] resulted in restrictions being placed on preparations containing it,[5] which may affect its use for, among other indications, the treatment of acne. At about the same time that moves were being made to limit the use of hexachlorophane in the United Kingdom Hibiscrub, a detergent disinfectant containing 4% Hibitane (chlorhexidine), was released. Its effectiveness as a skin disinfectant has been reported.[6-8] A trial was undertaken at this hospital to assess its tolerability by patients with acne.

A total of 48 patients suffering from all grades of acne attending the outpatient clinic were advised to gently wipe their forehead, cheeks, and chin, avoiding contact with the eyes and lips, morning and night with balls of cotton wool soaked in Hibiscrub. A total amount of 10 ml was used for a single application. Immediately after the application the whole face was to be rinsed thoroughly at least twice with fresh running water. The patients were supplied with written instructions to this effect. They were examined at fortnightly intervals for one month, when any evidence of erythema, oedema, itching, or pain was particularly looked for. Forty of the patients showed satisfactory progress over the whole trial period: 9 of them cleared up completely, 8 improved, and 4 others tolerated the treatment better than some other products they had previously used. Of the 8 who made no progress 3 had reactions which were severe enough for them to stop treatment on their own initiative. One of them had atopic eczema, another had received a course of topical steroids, while the third had a drier skin than is normally seen with this type of patient. Four other patients reported mild erythema or itching severe enough to make them stop the treatment. One patient failed to attend and follow-up correspondence produced no response.

Since most of the patients were satisfied with the treatment, many asking that they should continue with Hibiscrub, it would seem reasonable to carry out a comparative trial of the preparation with some other application commonly used in acne.

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Test of general practice trainees

SIR,—Recent discussion about the Temporary Registration Assessment Board (TRAB) examination prompts me to make a preliminary report on the findings of a test carried out for another purpose.

In September 51 trainees in their general practice year answered a paper consisting of 220 multiple choice questions. This paper was kindly supplied by Professor P S Byrne and the questions were similar to those previously presented in the MRCGP examination, being of a clinical nature and covering the specialties relevant for general practice. The candidates were not aware that an examination was to take place and had therefore not prepared themselves. Some of the overseas graduates had been in this country more than 10 years. All were registered.

Of the 24 United Kingdom graduates 22 obtained more than 100 total marks. Of the 27 non-UK graduates three obtained more than 100 out of 220. Negative marking was employed. The range of marks was from 12 to 152. It is interesting to note that a non-medical research assistant, employed in this department, obtained 63 marks and 10 of the overseas graduates obtained fewer than that. The overseas graduates tended not to finish the paper even though they were offered extra time, and some of them took up this offer. To allow for this, the answers have been analysed based on a percentage of marked answers actually given. If a 45% pass mark is applied then, on this basis, all UK graduates passed and 7 out of 27 non-UK graduates passed.

It may well be that by self-selection these trainees are an example of the better quality doctors who are entering general practice and have been doing so over the past few years. Even if this is not so and even though the test has been only of a small facet of their potential, these results would indicate that the problem being inherited by general practice is much greater than other reported results have so far indicated.

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Prazosin in treatment of hypertension

SIR,—Several cases of hypertension episodes at the start of treatment with prazosin have been reported.[1-3] We did a cross-over comparative trial of hydrallazine and prazosin in 15 outpatients on continuous treatment with a beta-adrenergic blocking drug (propranolol). A test dose of 1 mg prazosin was given at dinner, and the patient was told to stay home for the rest of the evening. If this dose was well tolerated treatment continued the next day with 1 mg thrice daily, whereafter the dose was increased as needed. Our highest dose was 15 mg daily.

No hypertensive episodes or side effects were seen except in one patient, who developed severe headache two hours after taking the test dose. Three days later the patient, on his own initiative, took another test dose with exactly the same result. He resumed hydrallazine therapy without side effects. Thus the mechanism by which hydrallazine and prazosin provoke headache seems to be different.

Our study showed that 25 mg of hydrallazine corresponds to 0·84 mg prazosin. A starting dose of 2 mg prazosin thrice daily, which is often used, is therefore equal to 60 mg hydrallazine three times daily—a dose which nobody would use to start with. We believe that hypotensive episodes could be avoided by using a smaller initial dose of prazosin. Generally we would recommend 0·5 mg three times a day.

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Medical terminology

SIR,—Whereas as a physicist I hesitate to write to you—and particularly on that most complex of areas in medicine, terminology—I feel strongly that the time is ripe for some adjustment to conventional usage to remove its blatant historical bias. The adjustment may be supported on four grounds: firstly, to assist new entrants to the medical profession; secondly, to assist those working in paramedical disciplines (who may not be too conversant with the intricacies of medical terminology); thirdly, to maintain the usefulness of classical languages in understanding

unfamiliar words; and, fourthly (from an aesthetic point of view), to encourage philological regularity.

As a rule medical words concerned with visualisation techniques are suffixed generally and understandably by "-graphy" (from the Greek γραφειν to write). The prefix to the ending may either describe the agent of the visualisation or its (anatomical) object. The agent forms—thermography, radiography, and ultrasonography—are regularly derived from the Greek θερμοτης (heat), the word "radio" (connected with rays or radiation, 1881), and the Latin *ultra sonus* (beyond sound). With them may be included the descriptive "scintigraphy" (Latin *scintillare* to send forth sparks or little flashes of light).

However, the anatomical forms, such as venography, arteriography, renography, mammography, cardiography, have a regular origin (from the Latin *vena*, *ren*, and *mammalis* and the Greek αρτηριο and καρδια) but in use are commonly limited to describing visualisation by *x* rays alone. Indeed, two out of three medical dictionaries consulted specifically mentioned *x* rays in the definitions. This historical bias can further be seen implicit in the absence of the word "hepatography" (Greek ἡπαρ liver).

In my opinion there is a case to be made for removing this (now old-fashioned) emphasis. Any visualisation of the breast, whether achieved with *x* rays, heat, ultrasound, or another agent, should be described by the one word "mammography." If further description is needed the word may be prefixed by the agent—for example *x*-ray mammography, ultrasonic mammography. These expressions would then be equivalent in meaning to "radiography of the breast" and "ultrasonography of the breast" respectively. (If there is likely to be ambiguity the word "radiography" may need one of the distinctive prefixes "isotope-" or "*x*-"). Similarly renography would indicate visualisation of the kidney, whether by *x* rays or ultrasound, and if the study was extended in time to monitor function it could be described by the word "extended" (to differentiate it from a "dynamic" study, which might reasonably imply real-time visualisation).

Although inertia may preclude the development, improvement, and implementation of the proposals described here, their acceptance would not only lead to a more general outlook on anatomical imaging but also provide terminology unobscured by prejudice or history.

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Whooping-cough vaccination

SIR,—Professor G Dick's widely quoted estimate[1] or guess (18 October, p 161) of one to two cases of permanent brain damage per 10 000 children immunised is now apparently related to the two cases of encephalopathy he knew of or personally saw during his 10 years in Belfast. He states that both children had brain damage attributable to a pertussis vaccine used in the mid-1960s, but neither case merited a mention in his 1967 account of reactions to combined vaccines containing killed *Bordetella pertussis*[2] or in his 1972 paper[3] in which he based his estimate of 80 cases a year in the United Kingdom on the new discarded bare figures for unnamed cities A and B. Indeed, in 1966, at about the time he left Belfast, he stated that he was glad to say that he had never seen a case of encephalopathy in any of his studies,[4] although in one of his earliest trials of quadruple (DTP-Polio) vaccine one of twins had developed repeated convulsions but it was later found that the twins had been subject to convulsions before immunisation. Another child developed what was described as petit mal, but she made a complete recovery. Are these the cases Professor Dick has in mind—children given an early experimental batch of DTP-Polio which he reported to be unstable and unduly reactogenic?[4]

Since pertussis vaccine was predominantly administered to Belfast children in the form of DTP-Polio in the mid-1960s it is difficult to understand the figure of 30 000 children immunised with pertussis vaccine alone or even with DTP. The situation is further complicated by Professor Dick's own observation at the time that certain vaccines, but not all, were unsuitable for administration to children under 6 months of age.[2] Yet he rebukes Edsall for not appearing to "appreciate that it is not acceptable to extrapolate from data obtained with different vaccines used at different places in different countries at different times."

Professor Dick claims that his guessed rate of encephalopathy after pertussis vaccine is "remarkably similar" to the rate derived from Gostling's data. But Gostling has never seen fit to publish his data. In a recent communication[5] he chose to rely on a personal communication from Ehrengut concerning two cases of permanent disability after DTP given in West Germany. Gostling is possibly reticent over his own series of five serious reactions, including one death, because he has had "difficulty in tracing the records of these children."[6]

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SIR,—The Joint Committee on Vaccination and Immunisation (20 September, p 687) states that "the hazard of whooping cough remains greater than that of immunisation." Its conclusion that vaccination is therefore desirable is based on the assumption that in assessment of a medical procedure the observed benefits can be weighed against the observed risks. I suggest they cannot unless account is taken of two other considerations.

The first is that while the benefits are likely to be fully assessed (they are sometimes overestimated, as by the suggestion that the trend of quarterly notifications in England and Wales since 1950 provides clear evidence of the efficacy of immunisation against whooping cough[1]), the ill effects may be underestimated, because they are unrecognised, unreported, or delayed. The second consideration is that a death or disability from a disease is a very different matter from a death or disability due to medical intervention. The point is not only or mainly that the latter brings medicine into disrepute, although this deserves to be considered: it is that a patient or his relatives can far more readily accept a tragedy which seems to occur naturally than one which in their eyes was clearly avoidable. For a mother whose child has been seriously disabled by immunisation it is not a sufficient answer that some other child, unidentified, has been saved by the same procedure.

In the light of these considerations, when assessing a medical procedure which involves significant risks it is necessary to show that the hazards of the disease are not only greater, but very much greater, than those of intervention.

THOMAS MCKEOWN

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SIR,—Professor G W A Dick (18 October, p 161) states that adverse reactions to pertussis vaccine are probably undernotified; he could also have added that cases of pertussis are also undernotified—they must be, in view of the difficulty in making a certain diagnosis. At the same time, we have no idea of the size of the reservoir of *Bordetella pertussis* in the community.

In this practice of approximately 11 500 patients we dutifully omitted pertussis from our immunisation programme when the alarm bells rang last year. Since then we have had two infants admitted to hospital with pertussis, the first in my 18 years' experience in general practice to require admission, and one very nearly died. Professor Dick further suggests that we should immunise only the deprived groups. Does he really imagine that in the middle of a busy paediatric screening and immunisation clinic, with all social classes intermingling, it is going to be possible to differentiate?

It seems probable that the omission of widespread pertussis immunisation will result in a greater reservoir of infection in the community, with more children at risk and more children seriously ill when they get the disease.

We are grateful for the clear advice given by the Joint Committee on Vaccination and Immunisation (20 September, p 687) and by your leading article (25 October, p 186) and we shall recommence pertussis immunisation for all our patients with three clear exceptions: (1) those whose parents specifically refuse despite our advice; (2) those in whom there has at any time been any suggestion of cerebral damage; and (3) those in whom there has been the slightest reaction—local or general—to a previous pertussis injection.

P D HOOPER

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SIR,—The statement by the Joint Committee on Vaccination and Immunisation (20 September, p 687) and your leading article (25 October, p 186) are timely. Equal attention should also be given to notification of whooping cough. Notification of pertussis is based on a clinical diagnosis. Bacteriological confirmation is not possible in all cases. A