to the tracheal bifurcation following a natural anatomical angle. Thus the importance of not pushing the tube down too far, which can be avoided by choosing a correct length of tube, can be demonstrated.

Two detachable "lungs" provide demonstration facilities for mouth-to-tube resuscitation, self-inflating bag resuscitation, endotracheal suctioning, or visualizing intubation of the right bronchus. A warning buzzer will sound if the laryngoscope is levered against the upper teeth. Pressure on the larynx can be simulated, permitting the demonstration of this useful manoeuvre often needed to facilitate a difficult laryngeal view, such as when the larynx is lying in anterior position.

A unique feature of the intubation trainer is that it allows the simulation of varying degrees of difficulty for the trainee. Anterior or posterior positional movement of the larynx assembly in relation to the spine is adjustable, thereby permitting repeatable settings of degrees of difficulty from "very easy" to "difficult." Supplementing the apparatus is a set of teaching cards which supply, with teaching notes, the necessary information to perform the manoeuvre in the correct manner.

Though primarily designed for teaching by experts to small classes, the nature of the presentation is readily amenable to self-teaching, the student following the description booklet and the teaching cards and practising on the intubation trainer until he understands the manipulation and achieves repeated intubation success.

While it cannot be claimed that the ability to intubate the "trachea" of a stimulator satisfactorily means proficiency in the human situation, nevertheless the dexterity required and the understanding of the principles involved for intubation permit a highly informed approach to the "live" event. Medical students who had been trained by the teaching scheme using the Laerdal model (the only alternative commercial apparatus) displayed a ready expertise when faced with endotracheal intubation on the anaesthetized patient. On the normal adult patient most students were able to perform intubation satisfactorily and without tissue damage or undue delay on their first attempt.¹

The scheme, known as the Royal Free Hospital Endotracheal Intubation Training Scheme, complete with intubation simulator, instruction manual, and display teaching cards, is being commercially prepared and distributed by Vitalograph Limited of Buckingham.

—I am, etc.,

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¹ Howells, T. H., Emery, F. M., and Twentyman, J. E. C., *British Journal of Anaesthesia*, 1973, 45, 400.

Psychiatric Referral in the General Hospital

SIR,—Dr. G. P. Maguire and his colleagues (16 February, p. 268) have described an interesting investigation of psychiatric morbidity and referral in the medical ward. However, in discussing factors affecting referral there is some confusion between those likely to be related to recognition of psychiatric illness and others

which may then influence the decision to refer. A record of past psychiatric illness would seem to fall into the first category while severity of psychiatric disturbance is probably related not only to recognition of illness but also to the choice of which ill patients to refer. The only evidence specifically related to the second category concerns the 26% referral of patients whose notes indicated an awareness of psychiatric disturbance. Referral was "very strongly determined by how far their behaviour had obtruded or created problems for the medical staff"—a disappointing reflexion on the relative emphasis of management problems over clinical factors in the decision to refer.

A more optimistic picture, however, was revealed by study¹ by M. J. Pritchard of factors related to psychiatric referral in this general hospital. Here the comparison was between referred and non-referred patients, all of whom were diagnosed (that is, recognized) as psychiatrically ill. Referral occurred in about a third of the 252 cases and was found to be related to such factors as age, type of psychiatric illness, and the extent to which it was due to organic disease, as well as the existence of a suicidal attempt. Previous psychiatric contact within this group was inversely related to referral—a possible interpretation being that information from the earlier psychiatric assessment was often considered to be sufficient for the present admission.

From these results it appeared that referral was not a matter of chance but was being influenced by identifiable and valid clinical factors. At the same time, however, considerable differences were found between physicians in their use of psychiatric referral. This correlated with other variables thought to reflect the psychiatric awareness of the physician and/or his relationship with the psychiatric department, pointing again to the value of liaison work for the psychiatrist in the general hospital.—I am, etc.,

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¹ Pritchard, M. J., *Postgraduate Medical Journal*, 1972, 48, 645.

Co-trimoxazole Resistance

SIR,—In the recent correspondence about co-trimoxazole resistance Dr. R. W. Lacey and Mrs. Evelyn L. Lewis (20 October, p. 164) referred to our report of thymine-requiring mutants isolated from infected urine and Drs. R. Then and P. Angehrn (12 January, p. 78) quoted our findings in support of their view that "the selection of thy mutants in vivo which are able to survive and are due to the use of co-trimoxazole is obviously a rare event of little importance for clinical therapy." Perhaps our experience may help to clarify some of the points raised in these letters.

The three strains of thy mutants of *Proteus mirabilis* which we isolated from infected urine in 1971 and 1972 alerted us to the existence of the phenomenon, but despite a very careful watch since 1972 only one *E. coli* thy mutant has been isolated from over 75,000 urines examined. The patient had renal calculi with gross pyuria, as did the other three patients pre-

viously reported,¹ and had been given co-trimoxazole for long-term suppressive therapy. The thy mutants isolated from these patients were all stable in vitro and have not reverted to normal wild type organisms in up to three years of preservation by subcultures on Dorsett egg medium. In all our patients the thy mutants disappeared from the urine and were replaced by normal organisms after cessation of co-trimoxazole therapy. These findings suggest to us that the thy mutants are rare and can be associated with certain clinical situations, particularly infected renal calculi treated with long-term co-trimoxazole.

It is possible that the urine of these patients may have contained a quantity of thymine sufficient to maintain the growth of the mutants, and this could be related to the pyuria. However, we have treated over 100 patients with infection and pyuria, but no stones, with long-term co-trimoxazole in similar dosage and have not encountered thy mutants. It is well recognized that live organisms persist in the matrix of infected calculi,² and therefore they could be exposed to co-trimoxazole for very much longer than is the case in infection without stones. A similar situation could obtain in other clinical conditions, and it is interesting that Dr. Lacey and Mrs. Lewis have recently isolated a thymidine-requiring strain of *Staphylococcus aureus* from the sputum of a child with fibrocystic lung disease who had been treated with co-trimoxazole. Live organisms could have persisted in the scar tissue allowing the mutation to occur.

We have also observed in vitro that *E. coli* NCTC 10418 and other strains of *E. coli* and *P. mirabilis* can produce a growth factor which enables these organisms to grow on minimal agar without thymine. If this were the case in vivo, one would not need to postulate pus cells as the source of thymine or thymidine. Persistence of live organisms in the stone might suffice.

Finally we think that the emergence of thy mutants in the urine of these patients represents failure to co-trimoxazole therapy, and it is important therefore to be aware of their existence.—We are, etc.,

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¹ Okubadjo, O. A., and Maskell, R. M., *Journal of General Microbiology*, 1973, 77, 533.

² Nemoy, N. J., and Stamey, T. A., *Journal of the American Medical Association*, 1971, 215, 1470.

The Solitary Thyroid Nodule

SIR,—Your leading article on this subject (10 November, p. 310) was the second in as many years (25 September 1971, p. 720) and indicates continuing interest in this problem. The more recent article rightly points out the different incidence of malignancy in various parts of the world. However, neither mentions the significance of sex in relation to the incidence of malignancy. There appears to be such a relationship in South India, where the overall incidence of malignancy in solitary nodules is comparatively high.

In our institution analysis¹ of 178 thyroid nodules considered to be "solitary" at operation disclosed 62 carcinomas (25 in

men, 37 in women), an incidence of 35%. Benign adenomas constituted 29% and diffuse and nodular goitres 28%. The outstanding feature of this series was the difference between the sexes—59% of nodules in men and 29% in women were malignant. Contrary to findings at Hammersmith Hospital,² nodules in adolescents were not always malignant; in fact in women they were more often benign. In men malignant nodules were more common at all ages except the fourth and fifth decades. ¹³¹I scanning in 97 patients failed to give a clear-cut differentiation between the various groups. Two patients with carcinoma had "hot" nodules.

We believe that in South India all solitary nodules in the thyroid gland should be removed for biopsy, preferably by hemithyroidectomy.—We are, etc.,

A. Y. SAMUEL
G. V. SHEAD

Christian Medical College Hospital,
Vellore, South India.

¹ Samuel, A. Y., Dissertation for M.S. Degree, University of Madras, 1972.

² Taylor, S., *Journal of the Royal College of Surgeons of Edinburgh*, 1969, 14, 183.

Social History and the Psychiatrist

SIR,—I quote from the interesting paper by Drs. P. Williams and B. B. Wallace (16 March, p. 505): "The patient's social history was more likely to be commented on by the general practitioner if the letter was addressed to a named psychiatrist, and this implies that the general practitioner is trying to provide useful information; in this case it is misguided, as social history was ranked 11th out of 12 for importance by the psychiatrists."

It seems very strange that confident diagnoses regarding pathological, as distinct from physiological, anxiety or depression can be made without an adequate and detailed social history and must certainly raise questions as to why psychiatrists should rate its importance so low.—I am, etc.,

JAMES McCORMICK

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Conversations with Consultants

SIR,—Would your special correspondent (30 March, p. 630) like to pay a visit here? All clinical consultants with teaching commitments have, over and above the usual problems of consultants, those concerned with teaching. Such commitments are generally unspecified in contracts, the payment is niggardly, and the medical school here is expanding. Some consultants feel that this latter is partly at their expense.—I am, etc.,

R. S. MORTON

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"I Certify that I Have Examined You"

SIR,—For three years now the Medical Protection Society has been advising its members in its yearly bulletin not to forget to delete the words "I certify that I have

examined you" from medical certificates in cases in which such an examination has not been conducted.

Several doctors, myself included, have by following this advice been threatened by the Department of Health and Social Security with prosecution for breach of their terms of service. I appealed to the M.P.S. and to my amazement found it to be unwilling or unable to support me in thus following its advice. I have since written again to the society but have received no reply.—I am, etc.,

J. W. G. SIMPSON

Whitnash, Leamington Spa

Medical Practices Committee

SIR,—Having read the discussion with Dr. Arthur Maiden (*Supplement*, 23 March, p. 27) I feel that certain questions have been left unanswered.

May I ask Dr. Maiden if the Medical Practices Committee obtains information on all the relevant factors such as hospital sessions, outside commitments, etc. when his committee considers applications for doctors to enter the list, and if so how this information is obtained?

Dr. Maiden also states that in about one-third of practice vacancy appointments there is an appeal. However, he omits to say that when his committee declares an area to be designated or intermediate no one has a right to appeal against this decision.

I feel that the time has come for the Medical Practices Committee to answer these questions for the profession. After all, surely no one should have the right to make a decision where there is no built in appeal system.—I am, etc.,

G. M. COLEMAN

Birmingham

** We showed Dr. Coleman's letter to Dr. Maiden, whose reply is printed below.—ED., *B.M.J.*

SIR,—The answer to Dr. Coleman's first question is simple. We get details of all known outside commitments in confidence from the executive councils—now family practitioner committees. In many instances we get a most complete picture of outside commitments from individual doctors when they appreciate the reason for our wanting this information. This knowledge can make all the difference to the committee's decision whether or not to admit an additional doctor in an intermediate or restricted area. I know of instances where the hospital commitments in a group practice may be equivalent to as much as the work of two or even three notional doctors.

The second question is not as simple and I must answer at greater length. The main statutory duty laid on the committee is the assessment of the adequacy or otherwise of the medical manpower in general practice throughout England and Wales. The only practical way we can do this is to adopt the administrative device of dividing the country into some 1,400 "classification areas" and indicating the relative adequacy of the manpower in each by the label "restricted," "intermediate," "open," or "designated." It is true that there is no appeal from these decisions—the main work

of the committee—but I wonder if the profession would really like the ultimate power in this matter to be handed over to the Secretary of State and the civil service. After all, at the moment it is in the hands of an independent body seven of whose nine members are in active general practice and nominated by the profession.

Though there is no statutory right of appeal in classification decisions the committee is always prepared to look at any individual instance in the light of fresh facts and always re-examines decisions at the instigation of executive councils, local medical committees, or individual doctors. On many occasions we have received deputations from executive councils to discuss representations on these matters. There is of course a statutory right of appeal to the Secretary of State for any individual doctor who has been refused by us inclusion in the list of any area which is intermediate or restricted.

I would like to stress to Dr. Coleman once again that the use of the Medical Practices Committee "designation" as a yardstick for the payment of designated area allowances was accepted by us with great reluctance as it was a use of our classification for a purpose for which it was not designed. The purpose of "designation" is to attract *additional* doctors to the area and an initial practice allowance automatically becomes available to all eligible newcomers.

Ever since a designated area allowance was made available to the established doctors in an area we have allowed ourselves no discretion whatsoever in moving areas from open to designated and vice versa and make these changes *entirely on the figures*. In view of the money at stake we feel this is the only action justifiable.—I am, etc.,

ARTHUR MAIDEN

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N.H.S. Family Planning

SIR,—As a retired general practitioner now working in the field of family planning, I have seen the load on the family doctor being statutorily steadily increased by a process of delegation without the least regard for the time he has available or his unavoidable financial need to have that number of patients which will make his continued existence in practice viable. I say nothing of the soaring costs of practice expenses. Most of us will recall the transfer of infant immunizations etc. on to the general practitioner's back and the closure of many of the child welfare clinics which resulted, no doubt with immense savings to the Government in power.

I do not myself honestly believe that a patient coming for the first time for contraceptive advice to a doctor (even her own) can have a proper medical and gynaecological history taken and examination made (including a cervical smear), the results noted and the necessary forms filled in, and careful teaching of the method of using the form of contraception agreed upon adequately carried out in much under half an hour.

I agree with Dr. R. G. Condie (23 March, p. 578) on the obligation of a doctor to include contraception, and sterilization, within ordinary medical (and I include hos-