PRACTICE OBSERVED

Young Practitioner Groups

Enderley group

MARTIN RHODES

So there we were, cast away from the bosom of our trainer and our vocational training scheme into the unprotected and exposed world of a principal in general practice. In particular there was the loss of comradeship of fellow trainees coming together in the face of the unknown pitfalls that the problems of patients pose. For three years we had met weekly to discuss our mutual problems, but what now? Well, there were our senior partners. But somehow the problems of their generation were not our problems. They had achieved open access and primary health care teams, had created the Royal College of General Practitioners, and researched the doctor-patient relationship, and general practice had blossomed with the family doctor's charter. We had inherited all this and what were we going to do with it?

Symptoms and signs

How were we going to continue our postgraduate education? We sat through courses and listened to lectures at the postgraduate medical centre and apparently passively imbibed the information of the distinguished consultants in the same way that we imbibed the drug company's lunches that went with them. But even the best of these did not seem to help us much with many problems that do not conform to medical models but appear in our surgeries. Couldn't we use the fund of knowledge and experience that was available among ourselves?

The end of the novellette is clearly a young practitioner group and it would be easy to look through a romantic haze at our Enderley Group to show that it is the answer to our needs; but unfortunately a more critical response is necessary, balancing what we have achieved and what we haven't of our original aims and objectives.

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Investigations

The catalyst for the formation of the group was the local vocational course organiser, who was also the convener of the education committee of the faculty of the Royal College of General Practitioners. He invited young principals from far and wide to a meeting to discuss their continuing education. We were introduced to a doctor who was a member of a young practitioner group and it became apparent that many of us had common ideas and aspirations. Accordingly, the 12 general practitioners around Harrow under the age of 30 met in our surgery in May 1979 and decided to form the Enderley Group.

The original objectives of the group were set out in the minutes of that meeting. They were (*a*) to keep up to date; (*b*) to form a consensus of management of clinical problems in general practice; (*c*) to combat professional loneliness. We also thought that the group might become a pressure group in the local medical community and perhaps the community at large. The group's secretarial expenses have been funded through the local faculty of the Royal College, although at any one time up to half the group's participants have not been college members. We decided to meet monthly in members' surgeries with the host doctor introducing unusual features of the practice to the membership. This would be followed by discussion on a topic chosen by a chairman, the chair rotating among the members. An open forum of clinical or practice problems would end the meeting.

Progress of the patient

Of the original aims, objectives, and format the only one that has been achieved is meeting every month. Over the years

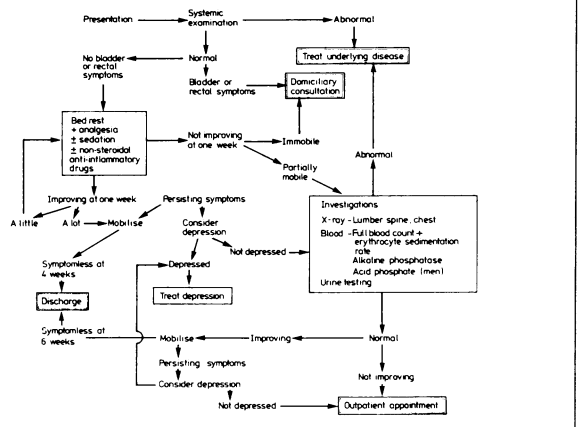
some members have met consistently—seven of the original 12 attend frequently—while new members newly arrived in practice have been welcomed. Some of these still attend; others have joined other young practitioner groups; and others have not felt the need to attend after a while. Thus meetings have attracted between four and 22 members, averaging about 10.

For almost four years we met in the surgeries of group members, but more recently in members' homes as we've exhausted the surgeries, homes are more comfortable, and the coffee is better. A topic chosen at the previous meeting usually requires that the members do a little preliminary work, such as making carbon copies of prescriptions for different classes of drugs or for certain diseases, recording referrals, and reviewing night or repeat visiting. Sometimes a member gives a prepared talk at the beginning, before a simple audit, after which we often discuss "difficult patients." There is usually a chairman, but our group members enjoy informality, although this means that more introvert members sometimes may not get a fair hearing. Angry and heated exchanges of view are a rarity. We use our own practice resources and have only once resorted to an outside speaker (a relaxation therapist). Once a year the group has a dinner, to which spouses are invited. On three occasions drug companies have given a buffet supper, but these have not worked well because the firms wanted to show promotional material which detracted from the meeting.

Meeting subjects

We have lots of meetings where we audit our prescriptions and have, for example, looked at our prescribing to geriatric patients, and at repeat and benzodiazepine prescribing. We have also reviewed our requests for pathological investigations and referrals to specialists. The management of common diseases and their presentation in general practice—such as asthma, backache, hay fever, and the "tired all the time" patient—are frequent subjects. We have sessions on "our most anxious patient," "the patient with the thickest folder," and "our most difficult patient."

At other meetings we have discussed "Patients I have asked to leave my list," "The hospital letter that made me angry," "A unique practice help," "Comparisons in the use and payment of ancillary staff," and "The non-contraceptive use of hormone treatment." We also did the Open University course "Topics in drug therapy" over several months.



Results of treatment

According to our educationalists we should indeed evaluate our learning experiences, and therefore we must ask how a young practitioner group assesses its experiences. We might be coming along because it is nice and easy but going away not having learnt anything. Indeed, most members say that one of the main reasons for attending is to keep in touch with old mates. We might argue that because we have been going four and a half years we must be getting something out of it, but are we, how can we tell, and who is going to do the assessment? Evaluation and assessment are scary words, bringing forth visions of essays, multiple choice questions, and vivas, which are clearly inappropriate to our group. We were once put off applying for section 63 funds because some evaluation of our work would be needed, because we feared that such an assessment would drive away those members who may need the support of the group most. Yet, if young practitioner groups generally, and the Enderley Group in particular, are to be considered groups concerned with self education, then we should be able to prove that members learn something when attending. Unfortunately, we have not devised objective methods of assessment.

In some subjects, however, we have something to show for our efforts. For example, the flow diagram (figure) for the management of acute low back pain was devised by the members and other examples of consensus management of common clinical problems may be shown. The results of a survey of the membership showed that this type of original objective was being achieved quite well. Members also said that they were often helped by the group with difficult clinical problems. Usually they get support and are assured that others in the group would not handle the problem very differently. Rarely are brilliant diagnoses made. In the same survey members also thought that we combated professional loneliness but "keeping up to date" is not well achieved. Journal sessions have not been a success, perhaps because the people at the meeting did not get excited by the papers examined.

In the beginning we thought that political action in its widest sense was a possible function of the group. This has been difficult, in part owing to the various political views of the membership from communists to conservatives. We presented our view to the authority when the local child psychiatry service broke down, but it still took three years to sort it out and a junior minister at the Department of Health did not think we were worth talking to when invited.

"Research" has come up several times as something the group could do. Although there have been good ideas, and more than 100 000 patients are in the members' practices, the workload has always been more than the members have been willing to commit themselves to.

Prognosis

It will be seen that the medical model of the headings does not include a diagnosis. This is because, as in general practice, the full diagnosis changes with time, so the needs of the membership have changed with time. What are we? Forward thinking, improving ourselves, and pushing forwards the boundaries of general practice? Or are we smug and self satisfied? Where to now? The group was formed for general practitioners in the first five years of practice and some of the original members are past this now. So I suppose we should bow out gracefully and form a middle aged practitioner group and let the youngsters take over and see if they can do better than us. But—and this is the point—we enjoy coming, and if we didn't the Enderley Group would collapse. After all, there are no known nasty side effects to the treatment.

Practice Research

Bedside haematology: new facility in general practice

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Abstract

A technique has been developed for performing rapid white cell counts and differential white cell counts at the bedside which uses a pocket McArthur microscope and a development of Field's rapid staining technique. A fixed volume thick film technique is used for the total white cell count that uses the minimum of equipment, all of which is disposable. In a study of samples from 88 patients using the thick film technique and standard laboratory techniques the thick film counts fell within $1{\cdot}1 \times 10^9$/l (mean) of the standard laboratory count. This compares with a value of $1{\cdot}0 \times 10^9$/l (mean) for within laboratory variability, using different electronic counters on the same specimen.

Introduction

A recurring problem in general practice is visiting a patient, usually a child, who is clearly ill with an infection of some sort, but in whom there is no pointer to the site of infection—for example, tonsils, ear drums, or urinary tract. Although these infections are often viral, the patient stands a good chance of being prescribed an antibiotic by his general practitioner, particularly if it is difficult to visit and the child seems ill (but not ill enough to be admitted to hospital). Usually this is harmless, but occasionally the child will develop an adverse reaction to the antibiotic. Also, it seems unsatisfactory to prescribe antibiotics for viral infections—intellectually and because it encourages microbial resistance. It is also expensive. A total white blood cell count and a differential cell count would be helpful in distinguishing those patients with a pyrexia of undetermined origin, who would be unlikely to benefit from antibiotics—such as those with a lymphocytosis or a blood film that suggests infectious mononucleosis. At present a white blood cell count and film is not usually requested, as a decision needs to be taken on the spot, and venepuncture is often inappropriate or difficult to perform. Therefore any technique which allows a white blood cell count and film to be done immediately at the bedside, using only a finger prick, would be an advantage. I describe such a technique and give a measure of its reliability.

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Method

MCARTHUR MICROSCOPE

The McArthur microscope (fig 1) is a pocket microscope which is no larger than a pocket camera (100 mm × 50 mm × 64 mm) and can perform the functions of a complex bench microscope,[1] giving magnifications of × 100, × 400, and × 1000 (oil immersion). It is a robust instrument suitable for keeping in a "black bag." Illumination is from the sky (or from a pocket torch).

MINIATURE LABORATORY

The miniature laboratory, including the microscope, may be housed in a plastic sandwich box (113 mm · 100 mm · 57 mm). The total weight is 790 g. It comprises, in order of use: cleansing spirit; lancets; Hawksley capillary tubes (catalogue number 1604); clean microscope slides; absolute methyl alcohol; cigarette lighter; Field's stain (A and B); cotton wool; mug of water (supplied by the household); McArthur microscope with Anisole (BDH) immersion fluid.

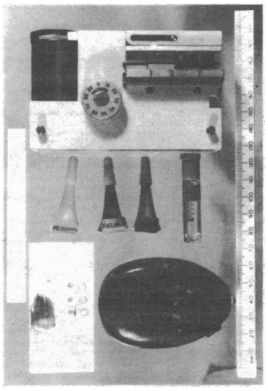

FIG 1—The McArthur microscope (top). The scale is in mm. Below the microscope is a Hawksley microhaematocrit capillary tube, oil immersion, fixative (methanol), and Field's stain (solutions A and B), in "minims" containers, which give the correct size of drop for the staining method described. They are easily filled with a syringe and needle. Below the stains is a pocket (ladybird) torch, which is easy to fit on to the microscope. Alternatively, built in illumination may be purchased. The specimen is a stained thin film with three thick films to its right. To prepare the thick films the slide is placed over a card (also shown) with three 4 mm rings drawn on it.

TOTAL WHITE BLOOD CELL COUNT

The principle of this technique is that a fixed volume of blood is spread over a fixed area, and after staining the number of cells is counted over a fixed proportion of the area. The film so made is a "thick film"—that is, there are too many red cells for light to be transmitted through it up the microscope. Therefore the film is rendered less opaque by leaching out the haemoglobin. This is performed during staining, with Field's stain,[2] which is an aqueous Romanowsky stain. This principle is used in the preparation of thick films for diagnosis of malaria, but the specific technique is different in this case, where the components of the stain (solutions A and B) are pooled together on the slide, which is also inverted, so that the haemoglobin leached out by the water in the stain falls away from the specimen by gravity.

To provide the fixed area on the slide, the slide is placed over a 4 mm diameter ring (drawn on card, positioned under the slide). The fixed volume is provided by the capillary tube. It should contain ¼-1 cm of blood at one end. When this is brought on to the 4 mm ring and blood is introduced into the centre of the ring (by gentle tapping) by capillary action a fixed volume is delivered to the ring if the attempt to fill the ring is maximal. The blood should be spread out to the periphery of the ring with the capillary tube held vertically. Drying is helped by a cigarette lighter (hand hot only). Staining and counting are shown in figs 2 and 3.

Counting is carried out over the central portion of the ring, using the · 40 objective and a 2 mm squared eyepiece (× 10) graticule. Nine of these squares (side 2 mm) fit into the centre of one field of view. By empirical testing I have found that if five of these sets of nine squares are used for counting the white blood count ($\times 10^9$/l) is the number of cells counted divided by 10. It is important that the central area only of the 4 mm ring is used for counting, and so it is helpful to centre the ring with the · 10 objective before starting to count. As an example, if 110 cells are counted in five sets of nine squares (45 small squares, side 2 mm on graticule) the white blood count is roughly 11×10^9/l. The eyepiece (× 10) should be extended 2 cm before counting begins.

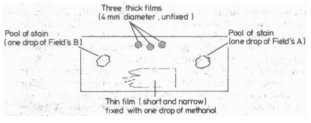

FIG 2—The specimens are on the slide, ready for staining.
Staining procedure: The pool of Field's B is drawn over the specimens using a tilted glass slide, care being taken not to wipe off the specimens. Solution A is then similarly drawn over the specimens. The slide is inverted and rocked to and fro a few times. Rinsing is in a mug of tap water. Dry with a cigarette lighter, hand-hot only.

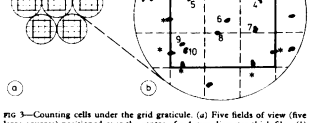

FIG 3—Counting cells under the grid graticule. (*a*) Five fields of view (five large squares) positioned over the centre of a 4 mm diameter thick film. (*b*) One (magnified) field of view, showing nine small squares (side 2 mm on the graticule) within one large square. *Note*: Only cells 1-10 are eligible for counting. The cells marked * fall on the perimeter of the large square, and should not be counted. The rule is that all of the cell must be over all of the perimeter line to be counted. The white blood count is the number of cells counted in five large squares divided by 10.

DIFFERENTIAL WHITE CELL COUNT AND BLOOD FILM

The differential cell count and blood film are prepared in the standard fashion on the same slide as the thick film and are stained at the same time (after initial fixing with methyl alcohol). The staining technique is described in fig 2. The total staining time is 10 seconds. The differential may be performed on the thick film (fig 4), which adds speed as white cells are clustered so densely (it is also useful in malaria). A full, detailed differential count is not always required, and a simple method is to count polymorphs, lymphocytes, and "others," unless there is some obvious abnormality. Red cell morphology is also noted—for example, hypochromia.

Infectious mononucleosis may suggest itself as the diagnosis if many atypical transformed lymphocytes are present and there is a lymphocytosis (relative at first, then absolute as the illness progresses). An example of such a film is given in fig 5; the specimen was stained at the bedside, and the photomicrograph was taken with the McArthur microscope to give an idea of quality and magnification it offers.