difficulties in ascertaining which department members of the public should be passed on to, or elsewhere.

We suggest that health authorities should routinely monitor the response times of major hospital switchboards, and that these should be expected to reach similar standards of performance to those in industry and commerce.

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**Reference**

1. Bakhai A. How easy is it to contact the duty medical officer responsible for acute admissions? *BMJ* 1990; **301**: 529-531.

## Primary care management of urinary tract infection in children

Sir,

Recently, a research unit from the Royal College of Physicians published guidelines for the management of urinary tract infection in children.[1] The lack of universal policies was recognized and recommendations were made for management, research and audit.

Prior to this publication, in July and August 1990, I surveyed 173 general practitioners in Cheshire to assess their management of children with suspected urinary tract infection. An anonymous questionnaire was distributed to practices within Crewe health authority. Replies were encouraged by a reminder one month later. Questions concerned urine collection, criteria for diagnosis, acute and prophylactic treatment, and timing and type of further investigations.

A total of 82 (47%) general practitioners responded to the questionnaire. The doctors estimated that they saw a mean of 6.3 children with symptoms of urinary tract infection each year. They were asked about method(s) used to collect samples; clean-voided urine samples were collected by 82% of doctors; sterile bag samples by 17% of doctors; clean potty specimens by 13% of doctors; and one doctor considered urethral catheterization. Different techniques were used to diagnose infection, some doctors using more than one method. Twenty two per cent of practitioners made the diagnosis on symptoms alone without culturing a sample; 73% relied on a single positive culture; 35% used microscopic findings of leucocyturia to assist them; and three doctors required two positive urine cultures.

For acute treatment, the most popular antibiotic prescribed by doctors was amoxycillin (35%). Thirty two per cent of doctors chose trimethoprim and 29% chose cotrimoxazole. Trimethoprim and cotrimoxazole were the two antibiotics most likely to be used for prophylaxis (chosen by 46% and 26% of doctors respectively). Thirty nine per cent of general practitioners investigated all children with symptoms of urinary tract infection; 20% of doctors investigated only if there was a recurrence of symptoms; and 34% investigated all boys following their first suspected urinary tract infection, and girls only after further infection.

These results raise a number of important points. A 47% response rate is low: replies thus do not reflect practices of all doctors in the area. However, within the group that did reply there was a wide variety of practices. One suspects an even greater diversity exists within the non-responders. A total of 22% of general practitioners diagnosed urinary tract infection without collecting a urine sample. It may have been that children without infection were being treated with antibiotics and subsequently investigated; while those children with urinary tract infection without symptoms obviously attributable to the urinary tract were being missed. The Royal College of Physicians' guidelines emphasize pyrexia, vomiting, failure to thrive, prolonged neonatal jaundice and suspected sexual abuse as indicators for the need to culture urine.

Despite the recommendations of the Royal College of Physicians over half of the doctors in this survey (54%) were not investigating all young children following their first suspected urinary tract infection. In particular, girls were only investigated following further infection. Thirty five per cent of the doctors used amoxycillin as their first-line antibiotic to treat acute urinary tract infection. There is increasing organism resistance to this agent.[2] Trimethoprim, cotrimoxazole, nitrofurantoin or an oral cephalosporin are suggested antimicrobials of choice.[1] Knowledge of current urinary tract bacteriology is obviously important.

The importance of diagnosing urinary tract infection in childhood is to relieve symptoms, to detect underlying treatable anomalies and, if possible, to prevent renal damage. Although my survey has many inadequacies, it suggests that symptomatic children may not be receiving appropriate investigations. Children with chronic renal parenchymal damage represent a large proportion of those on renal replacement programmes.[3] It is hoped that the new guidelines will clarify a previously confused area, raise the general level of awareness of doctors and provide the impetus for practical resarch.[4] The impact of the guidelines on medical practice needs to be assessed by further studies.

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**References**

1. Royal College of Physicians Working Group. Guidelines for the management of acute urinary tract infection in childhood. *J R Coll Phys Lond* 1991; **25**: 36-42.
2. Al Roomi LG, Sutton AM, Cockburn F, McAllister IA. Amoxycillin and clavulanic acid in the treatment of urinary infection. *Arch Dis Child* 1984; **59**: 256-259.
3. Chantler C, Carter JE, Bewick M, *et al.* 10 years' experience with regular haemodyalysis and renal transplantation. *Arch Dis Child* 1980; **55**: 435-445.
4. Smyth RL, Berman L, Valman HB. Current practice in managing urinary tract infection in children. *BMJ* 1988; **297**: 1516-1517.

## Computer assisted learning for general practice

Sir,

I was surprised to read in the article by Stanley and Stephens (April *Journal,* p.155) that a literature search had shown very few examples of computer assisted learning from general practice, and in a later part of the paper they comment that at present, computer assisted learning for general practice is in its infancy.

This teaching innovation in general practice was developed at the University of Glasgow in 1975, and the technique was published widely at the time.[1-6] It has been used for both undergraduate and postgraduate teaching in general practice. It is encouraging that after 16 years a similar system is being developed in other medical schools.

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**References**

1. Murray TS, Cupples RW, Barber JH, *et al.* Computer-assisted learning in undergraduate medical education. *Lancet* 1976; **1**: 474-476.
2. Murray TS, Cupples RW, Barber JH, *et al.* Application of computer-assisted learning in medical teaching in general practice. *Update* 1976; **13**: 523-532.

3. Murray TS, Barber JH, Hannay DR. Computer-assisted learning as a means of self-assessment. *Update* 1976; **13:** 532-534.
4. Murray TS, Dunn WR, Cupples RW, *et al.* The potential of computer-assisted learning in undergraduate medical education. *J R Coll Physicians Lond* 1977; **2:** 401-404.
5. Murray TS, Cupples RW, Barber JH, *et al.* Teaching decision-making to medical undergraduates. *Med Educ* 1977; **2:** 262-264.
6. Murray TS, Barber JH, Dunn WR. Attitudes of medical undergraduates in Glasgow to computer assisted learning. *Med Educ* 1978; **12:** 6-9.

## Training in general practice: the other side of the coin

Sir,

Despite continuing concerns about the quality of the hospital component of vocational training, few general practitioners appear to oppose it in principle.[1,2] Most hospital specialists, however, seem to experience considerable anguish at the idea that any serious or suitable trainee for their discipline could possibly consider spending a period in general practice, much less that they could actually gain from this experience.

My own specialty, accident and emergency medicine, has enormous overlaps with the practice of family medicine; its relevance to general practice training was discussed in a recent letter to this *Journal*.[3] Nevertheless, most accident and emergency trainees spend only a few weeks at the most in a general practice, usually during their time as a senior registrar. A recently issued job description for such a post minimized even this brief experience by offering 'visits to local health centres', comparable perhaps to reducing the hospital component of vocational training to visits to local outpatient clinics and wards.

General practice is a major specialty in the United Kingdom, attracting some of the best medical graduates and utilizing its own independent body of knowledge. Until hospital consultants and general practitioners alike recognize that the flow of information, training and personnel between hospital and community should be a two-way process, both sides of this great divide will remain comparatively unaware of the other's assets and requirements.

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**References**

1. Styles WM. General practice training in the hospital [editorial]. *Br J Gen Pract* 1990; **40:** 401-402.
2. Kearley K. An evaluation of the hospital component of general practice vocational training. *Br J Gen Pract* 1990; **40:** 409-414.
3. Touquet R. General practice training in the hospital [letter]. *Br J Gen Pract* 1991; **41:** 36-37.

## General practice at the coal face

Sir,

Clinical medicine is one of the very few professions where those who teach must also practice, unlike for instance teachers and nurses. This means that all general practitioners in university departments work as principals, either in a university-based practice or increasingly as partners in other practices. Clearly time is allowed for teaching and research, but so is time allowed for other activities by general practitioners.

Those in university departments are well aware of the pressures and problems of general practice, not only because of their continued involvement but also because there is a constant movement of general practitioners in and out of such departments. It is important for this clinical commitment and flexibility to continue if the profession of general practice is to flourish as a discipline and so maintain some independence from political pressure.

Unfortunately this task is made more difficult by the views expressed by Dr Sterland and Dr Hooper in their letters about general practice at the coalface (April *Journal*, p.170). While such concerns are understandable, it is not helpful to disparage a group of colleagues, most of whom work hard without favourable conditions or special relationships as advisers to the mine owners.

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## Longer booking intervals in general practice: effects on doctors' stress and arousal

Sir,

The paper by Wilson and colleagues (May *Journal*, p.184) would seem to be flawed by considering consultation length during a surgery in isolation from the rest of the day.

If the same number of patients were seen in an experimental surgery with longer consultation times as in a control surgery, the general practitioner must have finished the surgery later. (The authors omitted to mention whether control and experimental surgeries contained the same number of patients or if the doctor saw less patients with a longer consultation time in the experimental surgery.) It would have been interesting to know what the doctors' stress and arousal scores were later in the day when hurrying to do visits and other commitments with less time than usual.

The authors concluded that running late may be a major cause of stress for general practitioners which would be obviated by longer consultation times. However starting visits and other clinics late because of extending their surgery consulting hours might cause general practitioners to be even more stressed during the rest of the day. A hurried surgery may be the lesser of two evils.

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## Curettage and cautery of skin conditions in general practice

Sir,

Dr Jackson's letter (May *Journal*, p.213) was interesting and useful to all those doing minor operations in general practice. A further technique is that of curettage and cautery. I use this extensively as a clinical assistant in a hospital dermatology department and now in general practice. It is quick, easy to perform, effective and combines biopsy and removal in one procedure which patients prefer.

Conditions which are suitable for this treatment include basal cell carcinoma, squamous cell carcinoma, keratoses of all types, pyogenic granuloma, keratoacanthoma and warts which do not respond to liquid nitrogen.

Of course some lesions are not suitable, for example, multifocal basal cell carcinoma, very large lesions and some of those very close to the eye. However, patients of all ages can be treated using this method.

Equipment needed is a Volkman spoon and cautery machine. Lesions are locally anaesthetized and curetted carefully then cauterized. The procedure is repeated once and perhaps twice if necessary. The whole procedure takes between five and 10 minutes and gives extremely good cure and cosmetic results.

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