Peak flow meters

Sir,

Although portable peak flow meters have been widely used by chest physicians and general practitioners in the United Kingdom,1 they are not as popular in Japan. There have been no nomograms or regression equations made with such instruments for predicting peak expiratory flow rate (PEFR) in Japanese adults. Therefore, we formulated normal predictive equations using the mini-Wright peak flow meter (Clement Clarke) (unpublished results). These equations give predicted values in men and women aged 20–69 years:

Men: PEFR (l min⁻¹) = 147.0 – 1.30×age (yr) + 2.94×height (cm)

Women: PEFR (l min⁻¹) = 52.4 – 2.30×age (yr)

Recently the Assess peak flow meter (HealthScan Products) has become commercially available in Japan. Some doctors prefer the Assess meter because it is cheaper (4900 yen, about £22) than the mini-Wright peak flow meter (15 000 yen, about £66). However, accuracy and reproducibility of results must be assessed as well as the price.

Shapiro and colleagues,2 reported that the Assess meter was more accurate and stable than the mini-Wright meter at low flow rates (less than 300 l min⁻¹). We have also evaluated the accuracy of mini-Wright and Assess meters at low flow rates (250–349 l min⁻¹). Four units of the mini-Wright meters and three units of the Assess meters were individually connected in turn to a calibrated hot-wire flow meter and 10 measurements were made on each unit at low flow rates. The hot-wire flow meter is a type of pneumotachograph that measures gas flow by the change in the electrical current needed to maintain the temperature of the wire. The results obtained from the mini-Wright meter showed a strong positive correlation (r=0.980) with the calibrated hot-wire flowmeter. However, the measurements were a mean of 19.3% (standard deviation 2.7%) higher than the hot-wire measurements. The Assess meter had a less positive correlation (r=0.569) and wider variation: the mean error was 2.5% (SD 8.1%).

Since the error of the mini-Wright peak flow meter could easily be modified or corrected by, for example, dividing the mini-Wright measurement by 1.19 (that is, the hot-wire measurement multiplied by 1.19 equals the mini-Wright measurement), we recommend the mini-Wright meter for domiciliary practice.

HIROSHI KAWANE
RINZO SOEJIMA
KENJI KOJIMA

Kawasaki Medical School
Kurashiki City
Okayama 701-01
Japan

References

Triple therapy against Helicobacter pylori

Sir,

Studies have shown that in 95% of patients with duodenal ulcer the stomach is colonized with Helicobacter pylori.1 An editorial in the British Medical Journal2 discussing triple therapy for patients with a history of duodenal ulcer, who were taking long-term H₂ antagonist medication. We considered that triple therapy against H pylori could be offered to certain patients without the need for further gastro-duodenoscopy. A study was therefore undertaken in our practice.

A computer search of all 4200 patients registered at Llaiy health centre was carried out to identify those patients diagnosed as having a duodenal ulcer, confirmed by a barium meal examination, or at gastro-duodenoscopy operation, who were taking maintenance doses of ranitidine or cimetidine.

These patients were invited to attend a specially arranged duodenal clinic at the health centre in July 1991 in order to discuss the possibility of a 10-day triple therapy treatment with metronidazole 400 mg three times daily, amoxycillin 500 mg three times daily and bismuth chelate two tablets twice daily. The possibility of H pylori infection was discussed with each patient and the treatment and possible side effects were explained. Patients were also advised that the prescription charge would be approximately £10 unless they held an exemption or prepayment certificate.

A follow-up letter was sent three months later asking whether the patient had taken the triple therapy, what side effects were experienced and whether they were now having any symptoms of duodenal ulcer and whether they were taking any over the counter treatment for dyspepsia.

A computer search identified 29 patients. Twenty six patients were invited to the duodenal clinic, three patients being excluded because of gastric cancer, allergy to penicillins and old age, respectively. Nineteen patients attended the clinic and of these, 11 patients decided to undertake the course of treatment. This group comprised eight men (mean age 48.9 years) and three women (mean age 54.7 years).

Eight of the 11 patients who had taken the triple therapy replied to the questionnaire; one other patient had only started treatment the week before the questionnaire was received. Two patients reported nausea with treatment, the other six reported no symptoms that were judged to be related to the treatment. Six reported that they were now free of ulcer symptoms and did not require any treatment for indigestion or H₂ antagonist drugs. One patient reported having flatulence and one patient had recommenced ranitidine therapy. A computer search confirmed...
that nine patients have not requested H₂ antagonist therapy since their triple therapy treatment.

These patients have been spared the discomfort of further gastroduodenoscopy, and savings have been made on further consultation time, investigations and long-term treatment with H₂ antagonist therapy. The results of our experience are encouraging and we hope to follow up these patients over a period of time.

ADRIAN TAFFINDER
GAENOR TAFFINDER

Llwyd Health Centre
Llwyd
Wrexham
Clwyd LL12 0TR

References

Consulting habits of temporary residents

Sir,

Little attention has been paid to the consulting habits of holidaymakers in the United Kingdom. It is a generally held view that temporary residents seen in general practice are not only time consuming and a source of potential stress, but are also a largely unnecessary, costly burden to the National Health Service, albeit representing a considerable source of remuneration for some general practitioners.

In August 1991 all family health services authorities in the UK were sent a questionnaire asking for the number of high and low rate temporary resident claims made by general practitioners in the past year. By December 1991 80 of the 116 family health services authorities (69%) replied. There were 622,576 high rate claims and 969,610 low rate claims and at current rates (£1.45 and £7.65 respectively), this amounts to expenditure of approximately £14.6 million per year. Total expenditure on temporary resident claims is therefore estimated to be approximately £21 million per year. Family health services authorities and regional health authorities have been unable to audit this major source of expenditure as specific records for temporary residents are not kept and they have little knowledge of factors influencing temporary resident consultation rates.

Our own recent study of temporary resident consultations during one week in peak holiday season (19–28 August 1991), found that 15 of 210 consultations (7%) with temporary residents were for repeat prescriptions only. A similar study by Perkins¹ found that 18% of temporary resident consultations were for repeat prescriptions. These figures represent an estimated cost nationally of between £1.5 and £3.8 million. Our study also revealed that 13% of temporary resident consultations were for problems associated with pre-existing conditions.

A considerable proportion of temporary resident consultations may be avoided if prospective holidaymakers were to be given specific and appropriate advice concerning their medical conditions, especially in relation to medication, prior to departure. Use of posters in the waiting room, information leaflets, opportunistic health advice from practice nurses and doctors may be sufficient. Further research into the reasons for temporary resident consultations is necessary and, perhaps, a national campaign is needed addressing the issue with the aim of reducing unnecessary consultations by holidaymakers.

KIERON D COONEY
JOHN PARTRIDGE

The Medical Centre
Upper Green Road
St Helens
Isle of Wight PO33 1UJ

References

GPs and optometrists

Sir,

There has been recent interest in optometry and general practice (letters, December Journal, p.518). A study conducted in April and May 1991 investigated communication between general practitioners and optometrists using a questionnaire comprising closed questions. The questions were matched, that is the same issue was addressed in questionnaires sent to both doctors and optometrists. All optometrists and general practitioner trainers in the Tayside region were contacted. Questionnaires were sent to 60 general practitioners and 36 optometrists, and replies were received from 46 general practitioners (77%) and 29 optometrists (81%).

A total of 45 general practitioners 'never' or 'infrequently' replied to optometrists upon receiving the general ophthalmic services (Scotland) form noting ocular abnormality. Only one of the 29 optometrists recorded they 'often' received a written reply from general practitioners although 24 optometrists reported a desire for such feedback. Referral from the optometrist to the general practitioner was usually written — 39 out of 46 general practitioners (85%) reported that they received referrals in the form of a typed letter, a general ophthalmic service (Scotland) form, or a combination of both. Among the 29 optometrists 24 (83%) reported that they sent referrals in one or both of these forms. Referrals from general practitioners to optometrists were not written, a verbal message being sent via the patient.

The content of referral letters from optometrists was also examined. Forty two general practitioners and 24 optometrists thought that urgency of any subsequent hospital referral should be stated. The majority (35) of general practitioners felt optometrists were qualified to give a diagnosis of ocular abnormality. Most optometrists (19) wanted to refer patients directly to hospital ophthalmology outpatient clinics, and 27 general practitioners also felt that this was appropriate.

This last finding is interesting since Perkins¹ found that of 61 patients referred from optometrists, 50 required onward referral to an ophthalmologist. He concluded that 'general practitioners remain an effective filter in the referral system between optometrists and ophthalmologists'. Communication between the general practitioner and optometrist tends to be one sided: from the optometrist to the general practitioner. Space on a revised general ophthalmic services (Scotland) form to include an assessment of urgency of referral and likely diagnosis would be welcomed.

DAVID G BOGGON

602 Perth Road
Dundee DD2 1QA

References

Management of URTIs

Sir,

We were surprised that the paper by de Melker and Kuyvenhoven on the management of upper respiratory tract infection in Dutch general practice was predominantly concerned with describing the use of antibiotics (December Journal, p.504). More detailed considerations could have been given to advice on home remedies and the prescribing of antipyretic