

Inhaled drug delivery in asthma patients

Sir,
I read with interest the article 'Optimising inhaled drug delivery in patients with asthma' in the December 1995 *Journal*.¹ Would that life and 'lung deposition' were so straightforward but, alas, Jackson and Lipworth fundamentally misunderstand the principles involved. They fail to appreciate the importance of allowing patients to choose the device they prefer — something that respiratory trained nurses have been doing for years. There is no device preferred by all patients, and it is misleading to quote deposition statistics and extrapolate these to clinical practice. The amount of drug deposited in the lung using the same device in different patients varies tremendously: up to tenfold using sodium cromoglycate.² This variation far outweighs the estimated or mean figures as quoted by Jackson and Lipworth, and is not dissimilar to the variation seen in the same patient using the same device from one inhalation to the next.

All inhalers have widely varying characteristics, so it is imperative that deposition, clinical efficacy and systemic availability are all measured in the same study. It is inappropriate to infer clinical differences from studies using different methodologies, sometimes with patients and at other times with health volunteers. These points have been aired and discussed in recent correspondence.^{3,4} Any device which deposits more medication in the lung may or may not produce a greater clinical effect depending on the dose response curve of the medication in the patient at that time. It is unquestionable, however, that such a device *will* increase the systemic bio-availability of the deposited medication.

Finally, I am intrigued by the authors' suggestion that fluticasone propionate is a more potent inhaled corticosteroid, but that this does not translate into increased efficacy in doses greater than 1 mg/day. It is particularly when high doses of inhaled corticosteroids are required that chest physicians and respiratory paediatricians have extensively used fluticasone propionate and found it to be a clinical improvement compared with previously available inhaled corticosteroids. Could I suggest that, although it is possible to fool some of the people some of the time, ultimately the proof of the pudding is in the eating — or even, possibly, in the inhaling?

W LENNEY

Directorate of Child Health
Department of Academic Paediatrics

North Staffordshire Hospital
Stoke-on-Trent
Staffordshire ST4 6QG

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How well does mortality reflect the burden of illness due to stroke?

Sir,

Achieving a reduction in mortality rates from stroke is one of the targets of the Health of the Nation strategy.¹ Routine monitoring of this target is based on information derived from death certificates and depends on the accuracy of death certification.

To obtain more information about the impact of stroke locally, we reviewed the outcome for all 273 patients who had been admitted to a Bolton hospital following a first stroke in 1990. The inpatient mortality was 45% (123/273). A further 78 patients died within four years of discharge. Copies of death certificates were available for 67 of the patients who died after discharge. There was no mention of stroke or cerebrovascular disease on 33 of the 67 certificates examined (49%); on these certificates, death was attributed to cardiovascular disease ($n=18$), cancer ($n=10$) and other ($n=5$).

We obtained information about patients who were still alive four years after their discharge from hospital, by sending a brief questionnaire to their general practitioners (GPs). Four patients who had survived for four years after discharge died before the survey. The response rate to the questionnaire was 92.6% (63/68). Fifty of the survivors (79.4%) were living at home or with relatives; the remainder (13/63)

were living in a nursing home or residential accommodation. The degree of disability experienced by the survivors was estimated by GPs using the modified Rankin Scale,² and is presented in Table 1.

Our finding that there was no mention of stroke on almost half of the death certificates does not imply that the certificates were improperly completed. However, the absence of any mention of stroke on many of the death certificates means that stroke mortality rates, based on death certification, are not an adequate measure of the burden of illness caused by stroke.

MICHAEL DEVINE
JEAN VICKERS

Wigan and Bolton Health Authority
43 Churchgate
Bolton BL1 1JF

RICHARD LISTON
ARUP K BANERJEE

Bolton General Hospital
Bolton

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Higher professional training within general practice: provision of courses in the United Kingdom

Sir,

Two years ago, in a letter to the *BMJ*, Dennis Cox¹ identified the need for an up-to-date list of courses appropriate for general practitioners (GPs). Such a list, in the form of a directory of part-time and distance-learning degrees, diplomas, certificates, PGEAs and other courses, already exists and has been edited by myself for the past four years. The directory, which is updated annually, was developed as a

Table 1. Disability of stroke survivors (Rankin scale). $n=68$.

Disability	Persons	(%)
0 No symptoms	10	(14.7)
1 No significant disability	5	(7.4)
2 Slight disability	13	(19.1)
3 Moderate disability	18	(26.4)
4 Moderately severe disability	16	(23.5)
5 Severe disability	1	(1.5)
No response to questionnaire	5	(7.4)

Table 1. Course providers in a range of broad subject areas.

Broad subject area		Number of providers
Accounting and finance		2
Acupuncture/homeopathy		6
Community and primary health care		6
General practice		9
Computing skills and information science		6
Health care ethics/philosophy of medicine		9
Health promotion and science		9
Health law		4
Management		28
Medical education/training		10
Occupational medicine/public health		14
Paediatrics		7
Palliative medicine		4
Psychiatry/psychology/psychotherapy/counselling		14
Sports medicine		4
Therapeutics/toxicology/dispensing		6
Subjects included in other available courses:		
Addictive behaviour	Anaesthetics	Audiological medicine
BASICS	Biochemistry	Bioengineering
Dermatology	Medical statistics	Diving medicine
Environmental health	Forensic medicine	French for medical professionals
Gerontology	History of medicine	Rheumatology
Research methods	Human sexuality	Medical physics
Rehabilitation	Mental handicap studies	Osteopathy for doctors

service for medical education, and its availability has been made known to all regional advisors in general practice, many of whom order copies for each of the GP tutors in their region.

Nearly 200 courses suitable for GPs have been identified in the UK, partly by directly requesting course information from university departments and other providers, and partly by obtaining further information about courses advertised in journals and medical magazines. Lindsay Smith² identified seven master's degree courses available for GPs from UK departments of general practice, with another 11 planned within the next five years. Master's degree courses such as these form the backbone of higher professional training in general practice. However, the personal interests and development needs of individual GPs differ widely, and higher professional training within general practice should be directed towards such interests and needs. Many courses are available covering wide areas of medicine, and reflecting these variations of interest.

Lack of time has been shown to be the largest single factor preventing GPs from attending CME meetings.³ Since the ability of doctors to spend time studying varies between individuals, and within an individual's lifetime, not all will want to undertake master's degree courses owing to the time commitment involved. To satisfy the needs of these individuals there are also many courses to certificate or diploma standard, and shorter distance-learning courses that help to satisfy the requirements for PGEA. It is unfortunate that the UK National Accreditation panel

for Distance Learning courses does not publish, and make available, regular lists of such approved packages as a service to medical education.

The table below summarizes the diversity of such courses as are currently available, and indicates the number of providers in each broad subject category.

A wide range of higher professional courses exist that are suitable for GPs, and an annually updated directory of such courses is available mainly through regional advisers and GP tutors. I would welcome information about new courses for inclusion in the directory.

IAIN SIDFORD

St Stephens Surgery
Adelaide Street
Redditch
Worcestershire B97 4PS

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Defensive medical practice in context

Sir,
Lumbar spine X-ray requests are common. According to Porter and Hibbert, between 23% and 44% of those who consult their GP with back pain are eventually X-rayed.² However, only one out of 2500 X-rays detects something that has an impact on patient care that was not suspected from medical history and physical examination.² Moreover, evidence-based guidelines are stating that plain X-rays are not recommended for routine evaluation of patients with acute low back problems.³ Thus, it is important to attempt to understand why such referrals continue to take place. A number of suggestions have been made, including genuine diagnostic uncertainties, patient-initiated demand, and defensive medical practice.⁴ Last year, in the *British Medical Journal*, Summerton suggested that 98% of GPs are undertaking defensive medical practice because of fear of complaints, and diagnostic testing was highlighted as a particular problem.⁵ However, as was emphasized in the article, there are many other factors which may influence a GP's decision-making, and it is important that defensive medical practices are considered in the context of these other options.

Using a modified X-ray request form, 52 GPs in Huddersfield agreed to indicate their primary reason for ordering a lumbar spine X-ray for patients between the ages of 16 and 65 years. Based on a small, local pilot study, four options were presented:

- To make a diagnosis
- To exclude a diagnosis
- At the patient's request, and
- For medico-legal reasons (i.e. fear of complaint or being sued).

The demographic and practice characteristics of the GPs were representative of the district as a whole.

Over a 12-month period, 224 modified X-ray request forms were returned. The results were as follows:

- One hundred and twelve of these requests were for female patients; 105 were for male patients (7 not stated).
- Medico-legal concerns ranked considerably lower in terms of decision-making.

Table 1. Primary reasons for ordering a lumbar spine X-ray.

Number (%) of requests indicating this was the primary reason for referral (n=224).		
Make a diagnosis	118	(58%)
Exclude a diagnosis	62	(27%)
Patient request	42	(18%)
Medico-legal	2	(1%)
Total	224	