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- 2 No pulmozyme subsidy in Australia. *Scrip* 1994 December 2:24.
- 3 Pulmozyme funding refused in New Zealand. *Scrip* 1995 June 2:23.
- 4 Shah PL, Scott SF, Fuchs HJ, Geddes DM, Hodson ME. Medium term treatment of stable stage cystic fibrosis with recombinant human DNase 1. *Thorax* 1995;50:333-8.
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Pain in the hand and wrist

Picture of injection is misleading

EDITOR,—It is a pity that Michael Shipley's article on pain in the hand and wrist contains a misleading picture showing an injection on the radial side of the tendon in the carpal tunnel syndrome; it may put many doctors off trying this technique more than once.¹ Unless the injection is given as described in the article the nerve may be damaged. The "ulnar bursa" of tenosynovium is the target and is conveniently situated halfway between two palpable bony landmarks (the tuberosity of the scaphoid and the pisiform) or, as stated, to the ulnar side of the palmaris tendon.

Generally, orthopaedic surgeons see these patients and have the advantage of visualising the deeper structures. Thus for trigger fingers or thumb they know that they have to inflate the tendon sheath in the finger rather than inject "around" the module. They also know how low the cure rate is for ganglions treated by aspiration (popping them is better). It might be a good idea to mention that the nodule in De Quervain's tenosynovitis may be bony hard and puzzles young doctors.

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- 1 Shipley M. Pain in the hand and wrist. *BMJ* 1995;310:239-43. (28 January.)

Treatment of fractures of the scaphoid

EDITOR,—In my opinion, Michael Shipley's advice regarding the treatment of fractures of the scaphoid is erroneous.¹ In Britain the standard treatment of a fracture of the scaphoid is to apply a so called scaphoid plaster, extending from the proximal forearm to the interphalangeal joint of the thumb, leaving the fingers free to move. Recent study by Clay *et al* has confirmed that there is no difference in the non-union rate (10%) when scaphoid plaster and Colles-type plaster is used.² The duration of immobilisation may vary from six to 12 weeks, depending on the progress to union and the opinion of the treating surgeon. It is wrong to state that prolonged immobilisation is the only effective treatment.

Early surgical stabilisation of fractures of the scaphoid should be considered if there is displacement at the fracture site, the fracture involves the proximal pole of the scaphoid, or there is an associated perilunate dislocation of the wrist.

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- 1 Shipley M. Pain in the hand and wrist. *BMJ* 1995;310:239-43. (28 January.)
- 2 Clay NR, Dias JJ, Costigan PS, Gregg PJ, Barton NJ. Need the thumb be immobilised in scaphoid fractures? A randomised prospective trial. *J Bone Joint Surg [Br]* 1991;73:828-32.

Pyridoxine supplements may help patients with carpal tunnel syndrome

EDITOR,—The standard treatment offered for the carpal tunnel syndrome is still a splint, a local injection of corticosteroid, or surgical decompression.

1 Awareness of a simple and effective nutritional intervention—supplementation with pyridoxine (vitamin B-6)—remains low despite overwhelming evidence of its efficacy.

Vitamin B-6 deficiency is a common finding in the carpal tunnel syndrome, and the total work up of patients with the syndrome "should include a nutritional evaluation and, in particular, a determination of B6 status."² Vitamin B-6 status can be determined by measurement of erythrocyte aspartate aminotransferase activity or plasma pyridoxal phosphate concentration. Several studies have shown that supplementation with pyridoxine (usually in doses of 50-200 mg a day) relieves the symptoms of the syndrome,³ and objective tests of median nerve conduction have shown that compression of the nerve is relieved.⁴ A therapeutic response may require supplementation for up to three months, with cure rates over this time in the order of 85%. Even Phalen, who originally described the carpal tunnel syndrome in 1952 and pioneered its surgical treatment, agrees that, in future, pyridoxine may be the treatment of choice.⁵

Although supplementation with pyridoxine may occasionally cause a sensory neuropathy in doses as low as 200 mg daily over three years, this is usually a concern only in people taking 2000 mg or more. The neurotoxicity is believed to occur when the liver's capacity to phosphorylate pyridoxine to the active coenzyme pyridoxal phosphate is exceeded. The resulting high blood pyridoxine concentration could be directly neurotoxic or pyridoxine may compete for binding sites with pyridoxal phosphate, resulting in a relative deficiency of the active metabolite. Supplementation in the form of pyridoxal phosphate should therefore avoid this risk.

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- 1 Shipley M. Pain in the hand and wrist. *BMJ* 1995;310:239-43. (28 January.)
- 2 Fuhr JE, Farrow A, Nelson HS Jr. Vitamin B6 levels in patients with carpal tunnel syndrome. *Arch Surg* 1989;124:1329-30.
- 3 Ellis JM, Folkers K. Clinical aspects of treatment of carpal tunnel syndrome with vitamin B6. *Ann NY Acad Sci* 1990;585:302-20.
- 4 Driskell JA, *et al*. Effectiveness of pyridoxine hydrochloride treatment on carpal tunnel patients. *Nutr Rep Int* 1986;34:1031-40. Cited by: Werdach MR. *Nutritional influences on illness*. 2nd ed. Tarzana, CA: Third Line, 1993: 193.
- 5 Phalen GS. The birth of a syndrome, or carpal tunnel syndrome revisited. *J Hand Surg* 1981;6:109-10.

Author's reply

EDITOR,—The illustration of the injection technique for the carpal tunnel syndrome in the article is indeed incorrect and does not show what is described in the text. The needle should be introduced just to the ulnar side of the tendon of palmaris longus if this is present (figure). The use of the bony landmarks, as Christopher D Jefferiss describes, is a helpful alternative approach, but care should be taken that the needle is not inserted through a tendon. Although injection and inflation of the tendon sheath for trigger finger is clearly the

Injection for the carpal tunnel syndrome: needle is inserted at proximal palmar crease, just to ulnar side of palmaris longus tendon

ideal, this can be tricky and may prolong the procedure, to the discomfort of the patient and the operator. My article was directed at generalists with an interest in rheumatology, and in my experience the injection is successful when placed "around the nodule."

I am delighted to hear that a less cumbersome method of plastering is now practised in Britain for fractures of the scaphoid. I included this topic in the article to remind generalists that patients in whom this fracture is suspected should be referred to a fracture clinic for expert advice.

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Assessing health needs in primary care

Morbidity study from general practice provides another source of information

EDITOR,—We agree that more information is needed to support effective planning in primary health care.¹ Readers may be interested in the results of the fourth morbidity study from general practice, published last January.² Sixty practices, covering 1% of the population of England and Wales, recorded details of every encounter with a patient on their age-sex register between September 1991 and August 1992. Interviewers collected socioeconomic information about every patient, irrespective of whether they consulted during the year.

The report indicates how rates based on this sample of half a million people can be applied to the demographic structure of any local population. This would give local estimates of morbidity expected in general practice and other indicators of use of primary health care. Alternatively, more sophisticated techniques such as synthesised estimation can be used.

Other potential sources could be used for planning. For example, the Royal College of General Practitioners Research Unit has continuously collected and has published clinical data, currently from over 90 practices, for many years. Also ministers have recently announced that the Office of Population Censuses and Surveys will be responsible for managing the collection and analysis of data previously obtained by VAMP.³ We are interested in developing ways in which these data could contribute and invite those with responsibility for planning primary health care services to contact us.

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- 1 Shanks J, Kheraj S, Fish S. Better ways of assessing health needs in primary care. *BMJ* 1995;310:480-1. (25 February.)
- 2 Office of Population Censuses and Surveys. *Morbidity statistics from general practice, fourth national study 1991-1992*. London: HMSO, 1995. (Series MB5 No 3.)
- 3 Sackville T. VAMP research database. *House of Commons official report (Hansard)* 1995 Feb 22;255:col 219. (No 57.)

Standardised methods of data collection are required

EDITOR,—John Shanks and colleagues discuss the advantages, for the purpose of needs assessment, of combining knowledge from general practice with that derived from data sources held centrally.¹ They suggest that health authorities and family health services authorities may need to wait for a