

To the patient with arthritis or a stroke the hand becomes an important organ of locomotion and as much care should be paid to fitting the stick as to fitting the shoes. There is great scope for the development of an inexpensive range of walking sticks with a more functional handle.

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SIR,—In their study of 62 walking sticks used by the elderly (12 June, p 1751) Drs R Sainsbury and G P Mulley comment that “of the 24 patients who had fallen while using their sticks, 18 (75%) had sticks of the incorrect length. This suggests that sticks that are not of the conventionally accepted length may be dangerous.” This is a remarkable conclusion since they found that 45 of 60 sticks (75%) studied were of incorrect length. I welcome their interest in this neglected subject, but the results published provide no evidence whatever that “incorrect” length sticks are dangerous.

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SIR,—I refer to the article (12 June, p 1751) on the subject of walking sticks used by the elderly.

I am surprised that no mention has been made of the adjustable lightweight metal walking sticks that are produced by several companies and are made to DHSS specifications and available through the NHS and social services departments on special contract arrangement. The benefits of the metal adjustable walking stick are: (a) it is extremely light; (b) it has a shaped contoured handgrip; (c) perhaps most importantly, it is fully adjustable to height; and (d) because it is metal it cannot splinter and fracture as a wooden walking stick can do.

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SIR,—I should like to comment on the short report by Drs R Sainsbury and G P Mulley (12 June, p 1751). This is a useful report and it highlights the problem of what is the correct length of stick for any one patient. I should like to put forward a reason for the two methods of assessment of stick length for which the authors can find none. With the average individual the two methods quoted give approximately 15° of elbow flexion in the erect standing position, which on walking with normal reciprocal gait allows the stick to touch the ground with the elbow in extension, a stable joint position, in the stick forward position. The patient then brings the leg nearest the stick to the forward position and if the stick is too long the shoulder is forced into elevation as the leg passes the standing position. In practice however, the patient may have any one of several postural deformities resulting in stoops, lateral list, and so on; thus, if these cannot be corrected, the most effective method of stick length assessment is as follows.

Observe the patient's acquired stance, then using one of the many adjustable walking sticks available through the NHS, adjust to the comfort of the patient; again check stance,

and adjust stick up or down to allow the patient's shoulders to remain reasonably level. Finally, check the patient's gait with the stick; again, stick adjustment may be required. At this point, if the patient has a stick of his or her own, it can be cut to the same length and a suitable ferrule fitted.

One further point that should be raised is that about 50% of sticks are used wrong-handed, usually through ignorance. Walking sticks should always be used on the contralateral hand to the afflicted limb, not—as often portrayed on television—the same side. Try changing the stick to the right side and then see how often the patient's gait improves. If in doubt refer the patient to a chartered physiotherapist or occupational therapist for stick and gait assessment.

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What is diabetes?

SIR,—Dr P J Watkin's “ABC of Diabetes” (5 June, p 1690) is clear and succinct. However, it is unsafe to state without a caveat that “random blood glucose concentrations greater than 11 mmol/l [198 mg/100 ml] are clearly diagnostic of diabetes.” Indeed, this caveat is implicit in his description of the steeple or lag curve.

Furthermore, I think that it is unwise to apply the standard criteria in assessing a glucose tolerance test performed during pregnancy (pace the American Diabetic Association and WHO). The criteria of O'Sullivan and Mahan¹ remain the only validated criteria for this test in pregnancy.

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¹ O'Sullivan JB, Mahan CM. *Diabetes* 1964;13:278-85.

Importance of mastalgia in operable breast cancer

SIR,—Mr P E Preece and others in their recent article (1 May, p 1299) drew attention to the importance of mastalgia in operable breast cancer. We agree with the authors and wish to point out that patients with more advanced disease may also present with breast pain as the only symptom. During the last three years we have seen 20 cases of breast cancer where pain was the only presenting symptom and a further 13 cases where pain drew the patient's attention to an associated symptom. This represents 10.4% of all the new cancers we have seen during the same period. The mean age of the patients was 62. Except for two patients with bilateral symptoms, all complained of pain in the affected breast. The clinical findings and diagnosis were as follows: in 29 there was a lump, which was diagnosed clinically as malignant in 25 cases and benign in four; in one there was a retracted nipple diagnosed as benign, and in three clinical examination showed nothing abnormal. Except for five patients who had a clinically obvious cancer, all had xerographic examination of the breasts and a suspicious lesion was detected in all the 28 cases. There were two non-invasive cancers and the clinical stages of the remaining 31 were as shown in the table. In eight cases the pathological status of

Clinical stages of 31 invasive cancers of the breast

	T ₀	T ₁	T ₂	T ₃	T ₄
N _a	1	4	9	1	2
N _{1b}		6	1	1	1
N ₂		1	1	2	2

the axillary lymph nodes was not known (seven no surgery, one no nodes recovered at operation). Out of the remaining 23 invasive cancers, the axillary nodes were affected in 15 cases. In 26 cases histology of the tumour was available: 13 were of ductal origin and eight were lobular carcinomas. In three cases the tumours were of mixed ductal and lobular origin and two were tubular carcinomas.

Breast pain is a common symptom but only rarely associated with cancer. It therefore often causes delays in consultation and diagnosis. In the Huddersfield Breast Study we have emphasised the need to investigate any changes in the breast and were gratified to note that 28 of our patients had symptoms for three months or less before they sought advice (≤ 2 weeks 14, ≤ 1 month 11, ≤ 3 months 3, ≤ 12 months 2, > 1 year 3).

In this series, a combination of clinical and radiological examinations revealed a suspicious lesion in all the cases and therefore there was no delay in diagnosis. Localised pain in the breast should be taken seriously and we agree with the authors that such patients should be investigated thoroughly. If the investigations are negative, patients with persistent symptoms should be followed up for at least one year before cancer is excluded.

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Genetics of Alzheimer's disease

SIR,—Dr L J Whalley's comments (22 May, p 1556) on the leading article by Professor Rodney Harris (10 April, p 1065) make the very important point that there is so far no evidence that demonstrates an association between Alzheimer's disease and an infectious agent. The possibility that such an association does exist should clearly be investigated by all possible means, but the publication of any statement which implies that there is factual support for such an association is to be regretted. It may cause widespread alarm among the general public and may result in serious difficulties in the care and further investigation of the numerous patients with this disease.

Dr Whalley says: “There is little to recommend the inclusion of cerebral biopsy” when making the diagnosis of Alzheimer's disease. Unfortunately he implies that the reason for this is that “over the age of 60 Alzheimer's neuropathological changes may be present without clinical evidence of dementia,” suggesting that biopsy interpretation is thereby rendered difficult. This is not the case. Cerebral biopsy on patients with Alzheimer's disease under the age of 70 will invariably show diagnostic evidence of the disorder, since in this age group histological changes are profound by the time dementia is manifest and similar changes never occur in the normal population. It is only in subjects above the