- ⁴ Zajicek, J, *et al*, *Acta Cytologica*, 1967, **11**, 169.
⁵ Nichols, T M, *et al*, *American Journal of Clinical Pathology*, 1968, **49**, 342.
⁶ Govan, A D T, *et al*, *Journal of Obstetrics and Gynaecology of the British Commonwealth*, 1966, **73**, 883.
⁷ Cocker, J, *et al*, *Journal of Clinical Pathology*, 1968, **21**, 60.
⁸ Coleman, D, *et al*, *Clinical Oncology*, 1975, **1**, 27.
⁹ Roberts, J G, *et al*, *Clinical Oncology*, 1975, **1**, 297.
¹⁰ George, W D, and Burn, J I, *Clinical Oncology*, 1975, **1**, 291.

SIR,—With reference to Professor W W Park's letter (20 August, p 519), we would like to outline our policy with regard to needle biopsy of breast lumps. This procedure is carried out together with clinical examination and mammography as part of the outpatient management of patients at the breast clinic in Ninewells hospital. In no way is needle biopsy intended to compete with excision biopsy and frozen section, and to a very large extent Professor Park has missed the point. The conventional route of "excision biopsy—frozen section—proceed" is not being threatened but rationalised.

Taken individually, none of the three methods of outpatient diagnosis of breast lumps, clinical examination, mammography, and aspiration or needle biopsy is completely reliable, but experience has shown that their combined result forms a very sensitive indicator of malignancy and helps to define a group of patients in whom a firm diagnosis of carcinoma can be made preoperatively. The diagnosis is subsequently confirmed or refuted by excision biopsy. The advantages of this new approach are obvious to the clinician. It allows a rational treatment policy to be outlined on the basis of preoperative investigations. If frozen-section histology confirms the diagnosis the surgeon then has the necessary information to make a decision as to whether mastectomy is really indicated.

Since clinical examination of mobile breast lumps is unreliable even in experienced hands (most studies show an error rate exceeding 30%) one would have to biopsy and submit for frozen section all breast lumps and obtain a consent form for mastectomy from all these patients. We have learnt over the past 15 years that no amount of psychological preparation can effectively minimise the stress that this conventional policy has caused to many a patient with benign mammary dysplasia. As the incidence of the latter in adult life exceeds 20% the problem is a sizable one.

The comments made by Professor Park regarding the management of breast cysts do not, of course, represent standard management policies currently in use. Aspiration of breast cysts is always followed by the immediate re-examination of the breast, and in the presence of a residual lump excision biopsy is performed forthwith. The fluid is sent for cytological examination and mammography is performed, certainly in patients above the age of 30 years. Sometimes cystography is performed, and in any event these patients are carefully followed up and if the cyst or lump recurs excision is carried out.

In practice suspicion of malignancy may arise from clinical examination, mammography, or aspiration biopsy. When all three methods indicate malignancy the diagnosis is considered certain and it could be argued that a preliminary frozen-section biopsy is not strictly necessary, a viewpoint that is still debatable. In our opinion patients with obviously advanced malignancy do not need to have an operative biopsy if the cytological report is conclusive. Likewise patients in whom all three methods indicate the presence of benign

disease need not be submitted for excision biopsy and certainly should not have frozen-section histology.

In skilled hands aspiration biopsy is an accurate method of diagnosis provided its limitations are understood. All-important is the technique for aspiration and preparation of the material obtained. Considerable experience is required before a surgeon learns to obtain a good specimen. Clinical information is necessary for the correct interpretation of smears and the best results are obtained when the surgeon and the cytologist work together as a team. Since we have started the practice of having the cytologist report immediately to the surgeon on the adequacy of the specimen we have increased materially our diagnostic yield from needle aspiration of breast lumps.

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Strawberry pickers' foot drop

SIR,—I was interested to see the letter from Mr P A M Weston and Dr M L E Espir (20 August, p 520) reporting two cases of "strawberry pickers' foot drop." I recently noticed similar but milder symptoms in my own left leg.

I spent an afternoon planting seedlings which involved unaccustomed squatting on the haunches for about two hours. The following morning I noticed a mild left foot drop associated with mild pain, stiffness, and tenderness of the muscles of the anterior compartments of both legs. There was no sensory loss and the sole neurological abnormality was weakness of dorsiflexion of foot and great toe. Full recovery occurred over the next two days.

I attributed this to either compression/traction on the lateral popliteal nerve or, more likely, compression of the anterior tibial nerve within the anterior compartment. Both conditions are well documented,^{1,2} although not under these circumstances. The posture responsible for the cases reported by Mr Weston and Dr Espir was a prominent feature among a group of Indians with lateral popliteal lesions described by Marwah.³

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¹ Carter, A B, *et al*, *Lancet*, 1949, **2**, 928.

² Garland, H, and Moorhouse, D, *British Medical Journal*, 1952, **2**, 1373.

³ Marwah, V, *Lancet*, 1964, **2**, 1367.

SIR,—Mr P A M Weston and Dr M L E Espir (20 August, p 520) describe two patients with foot drop after picking strawberries and wonder if other cases have been seen.

Six years ago at the Moore Cottage Hospital, Bourton-on-the-Water, I saw a girl aged 18 with right foot drop apparently acquired after strawberry picking all day. She said she sat with her knees extended, reaching out and picking with her right hand and, I thought, possibly hyperextending her knee, unlike the two cases of Mr Weston and Dr Espir. Two

months later she had made a complete recovery.

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Effect of wholemeal and white bread on iron absorption

SIR,—We disagree with the suggestion of Drs R J Dobbs and I McLean Baird (25 June, p 1641) that the consumption of wholemeal as opposed to white bread involves the risk of developing iron deficiency. The results of their iron absorption studies, which suggest that the absorption of extrinsic non-haem iron is lower with wholemeal than with white bread, are of dubious value. Firstly, their results do not indicate that the intrinsic iron in wholemeal bread is less well absorbed than that in white bread; therefore they are wrong to conclude that the higher iron absorption compensates for the lower iron content of white bread. Secondly, the wholemeal bread contained about four times as much iron as the white bread; consequently the apparently lower extrinsic iron absorption with wholemeal bread may be a dilution effect.

About 29% of the total energy in the average UK diet is derived from cereals, mainly wheat.¹ Widdowson and McCance² in a one-year study showed that iron deficiency does not result, regardless of whether wholemeal or unsupplemented white flour is used, even when 75% of the total energy in the diet is derived from wheat flour.

We agree with Dr Dobbs that vegetarians tend to eat wholemeal rather than white bread. We have studied vegans, a group of strict vegetarians who eat no animal products whatsoever and whose diets are devoid of haem iron; some of these vegans had taken the diet for more than 20 years. Serum iron concentrations, total iron binding capacities, and haemoglobin concentrations were normal and dietary intakes of iron and vitamin C, which increases iron absorption, were much higher in vegans than in the general omnivorous population.³⁻⁵ We conclude that there is no evidence as yet to suggest that the consumption of wholemeal as opposed to white bread is an important factor in the development of iron deficiency.

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¹ Ministry of Agriculture, Fisheries and Food, *Household Food Consumption and Expenditure: 1974*. London, HMSO, 1976.

² Widdowson, E M, and McCance, R A, *MRC Special Report Series No 287*. London, HMSO, 1954.

³ Ellis, F R, and Mumford, P, *Proceedings of the Nutrition Society*, 1967, **26**, 205.

⁴ Ellis, F R, and Montegriffo, V M E, *American Journal of Clinical Nutrition*, 1970, **23**, 249.

⁵ Sanders, T A B, PhD Thesis, University of London, 1977.

*.*We sent a copy of this letter to Drs Dobbs and McLean Baird, whose reply is printed below.—Ed, *BMJ*.

SIR,—The absorption of iron in our study was measured by the amount of radioactive iron retained by the subject at 14 days (by which time no label should still remain in the gut). Since an identical dose of radiolabelled iron was given with all test meals the per-