

**Authors' reply: Treatment of loculated lactational breast abscess with a vacuum biopsy system**  
(*Br J Surg* 2005; 92: 1225–1226)

Sir

Thrush and Dixon describe an alternative method for aspirating viscous pus from breast abscesses. This is similar to the method we use normally, before resorting to the use of a mammotome for abscesses that do not resolve. We would note, however, that the initial injection of a volume of local anaesthetic into an abscess cavity can be very painful.

One of the reasons we have a lower threshold to perform a mammotome aspiration of the pus in our series as well as the many which we have performed since, is the fact that we rarely need to perform any more aspirations. Once the mammotome aspiration has been done, we see the patient once more to check that the abscess is resolving and then give an open appointment. This has the advantage of fewer visits to the clinic at an important time for mother and baby. Another advantage, also alluded to by Thrush and Dixon, is the biopsy. We once missed early diagnosis of a cancer in what seemed to be a lactating abscess in a young woman whose infection appeared to be responding to repeated aspirations.

M. Shere

*The Breast Care Centre, Frenchay Hospital, Bristol BS16 1LE, UK*

DOI: 10.1002/bjs.5313

**Letter: Value of fluorodeoxyglucose positron emission tomography in women with breast cancer**  
(*Br J Surg* 2005; 92: 1363–1367)

Sir

Landheer and colleagues failed to add any substantial data to the existing body of information within the literature on the topic. Like many previously published studies, theirs was underpowered ( $n = 42$ ) to arrive at any conclusive diagnostic statistics and they must surely be aware that FDG-PET scanning is not an adequate screening tool<sup>1</sup>.

Furthermore, its accuracy in detecting metastatic tumour in the axilla was only 70 per cent, much lower than that of ultrasound<sup>2</sup>. Tumours below 1 cm in diameter are beyond the resolution capabilities of FDG-PET and so will not be visualized, and it is too expensive to use routinely. Some tumours have chemoresistant clones and lack the specific glucose transport proteins to allow them to exhibit FDG avidity, and are thus invisible to FDG-PET<sup>2</sup>.

Mention is warranted too of the newer positron emitting labels such as FLT (fluoro-L-thymidine) that may be more tumour-specific and thus more sensitive<sup>2</sup>. The authors should be cautioned against confusing the limitations of FDG kinetics with those of PET.

Finally, they failed to mention the most topical application of FDG-PET research, namely the monitoring of response to neoadjuvant chemotherapy for breast cancer. Functional digital imaging has effectively questioned the conventional reliance on size as the only criterion for monitoring response to therapy. Because there is growing evidence that changes in tumour metabolism precede changes in morphology<sup>3</sup>, PET CT with novel tracers may (with improvements in spatial resolution, iterative reconstruction algorithms and correction for partial volume) evolve into a useful tool in staging of breast cancer and assessing response to chemotherapy. This would be of importance to non-responders who may then be detected early, have their regimens altered and their exposure to ineffective, toxic drugs reduced.

A. J. Hayanga

*Department of General Surgery, 1500 E. Med Center Drive, Taubman Center, University of Michigan Health Systems, Ann Arbor, MI 48109, USA*

DOI: 10.1002/bjs.5314

- 1 Gopalan D, Bomanji JB, Costa C, Ell PJ. Nuclear medicine in primary breast cancer imaging. *Clin Radiol* 2002; 57: 565–574.
- 2 Fueger BJ, Weber WA, Quon A, Crawford TL, Allen-Auerbach MS, Halpern BS *et al.* Performance of

2-Deoxy-2-[F-18]fluoro-D-glucose Positron Emission Tomography and Integrated PET/CT in restaged breast cancer patients. *Mol Imaging Biol* 2005; 12: 1–8.

- 3 Beresford M, Padhani AR, Goh V, Makris A. Imaging breast cancer response during neoadjuvant systemic therapy. *Expert Rev Anticancer Ther* 2005; 5: 893–905.

**Authors' reply: Value of fluorodeoxyglucose positron emission tomography in women with breast cancer**  
(*Br J Surg* 2005; 92: 1363–1367)

Sir

Being well aware of the intrinsic limitations of FDG-PET in breast cancer, we do not advocate its use as a screening technique. The aim of our study was to evaluate the role of FDG-PET in the detection of distant metastases in women with primary or recurrent breast cancer. As the study was intended as a pilot, we are aware that it was underpowered to draw definite conclusions. However, we do not share the opinion of Hayanga that FDG-PET is too expensive to use routinely; it is not a question of cost, but of cost-effectiveness. This requires careful assessment of the new technology, including optimal patient selection and rigorous evaluation of all effects (medical, social and economic). A recent Canadian meta-analysis concluded that the use of a PET management strategy for the staging of breast cancer is expected to remain economically viable in Canada<sup>1</sup>.

The statement that detection of tumours below 1 cm in diameter is beyond the resolution capabilities of FDG-PET is not completely correct. Metabolic activity rather than size determines FDG-PET positivity. Very large (usually benign or very well-differentiated cancers) may be PET-negative, while metabolically active lesions of just a few mm may be depicted by FDG-PET. We do not share the view of Hayanga on the use of other tracers like FLT. The fact