

alternative method for samplers; however one recent study failed to show advantage over 4 node sampling<sup>(1)</sup> and another suggested overlap between SLNB and sampling<sup>(2)</sup>.

If advantage is shown it remains to be demonstrated that it lies in the technique of SLNB and not in the number of sections and staining procedures, which if used for sampling would also raise the detection rate; furthermore micrometastases in LN's may not be of prognostic significance.

Assessments of the value of SLNB in improving discrimination of long-term outcomes are a long way from being produced. SLNB may improve estimation of LN status but LN status by itself is not as strong a prognostic factor as often imagined, at 10 years 35% of negatives have died, whilst 40% of positives are alive.

For accurate prognostic discrimination LN status has to be used in combination with other factors (eg) grade, size, hormone receptor. Even if it improves estimation of LN status SLNB can at best offer only a small advance in overall prognostic discrimination and may offer none.

## References

- [1] Macmillan, RD, Barbera, D, Hadjiminas, DJ, Rampaul, RS, Lee, AHS, Pinder, SE, Ellis, IO, Blamey, RW, Geraghty, JG. Sentinel node biopsy for breast cancer may have little to offer four-node samplers: results of comparison study. EJC 2001; in press
- [2] G Cserni. Estimating the overlap between sentinel lymph nodes and axillary node samples in breast cancer. Pathology Oncology Research 1999; 5: No 2: 129–133

## O-72. RANDOMIZED CONTROLLED TRIAL COMPARING 14 G CORE BIOPSY WITH MINIMALLY INVASIVE BREAST BIOPSY (MIBB) IN PRE-OPERATIVE DIAGNOSIS OF MAMMOGRAPHICALLY DETECTED BREAST LESIONS

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Conventional stereotatic 14 g core biopsy and 8 g minimally invasive breast biopsy were compared for diagnosis of mammographically detected breast lesions. Associated technical difficulties and complications were evaluated.

One hundred patients requiring needle biopsy for assessment of lesions detectable only by mammography, were randomized to either conventional 14 g stereotatic upright core biopsy (Siemens Mammomat or IGE 600T; Bard biopsy device) or 8 g prone core histology proceeded to diagnostic or therapeutic surgery. Those with normal or benign histology were discharged or followed up unless radiological appearances were suspicious. Calcium retrieval from lesions was greater with MIBB (84%) than with core biopsy (58%  $p = 0.008$ ).

There was greater polarization of histological findings into benign and malignant categories with MIBB than for conventional core biopsy (76% vs 58%). Pre-operative diagnosis of malignancy was 92% for MIBB vs 83% for conventional core biopsy.

Where malignancy was diagnosed pre-operatively, there was underestimation of an invasive component in both groups: 12.5% for MIBB AND 14% for conventional core biopsy. Pre-existing medical conditions did not preclude either technique. Technical problems related mainly to equipment failure for MIBB and to difficult positioning for core biopsy. Both techniques produced mainly mild bruising and the majority of patients did not require post biopsy analgesia.

(B1, B3 and B4)	Benign	Malignant	Other
Core Biopsy	28% (14)	28% (14)	44% (22)
MIBB	54% (27)	22% (11)	24% (12)

$p = 0.024$

8 g MIBB was well tolerated and more accurate in biopsy of microcalcifications. Further data is required to determine whether this additional outlay on MIBB is cost-effective in reducing the need for repeat diagnostic and therapeutic procedures.

## O-73. MINIMALLY INVASIVE BREAST SURGERY: EXPERIENCE WITH THE MAMMOTOME

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The mammotome is a diagnostic vacuum assisted large bore core biopsy gun placed and controlled under ultra sound (U/S) guidance, which takes repeated large cores of tissue without removal of the core needle in between each core. The skin incision is minimal, the dissection track is minimal and the amount of tissue removed depends on the size of the lump. Little surrounding tissue is removed. This is an out patient procedure under local anaesthetic with minimal complications. We present the technique and the outcome of our first 2 years experience.

A total of 115 patients underwent the diagnostic U/S guided mammotome procedure. Of these 78 were lumps, 18 nipple discharge, 11 thickening and 8 gynecomastia. The age varied between 17 and 80. Histological groups were 43 fibroadenomas, 28 fibrocystic change, 14 duct ectasia/periductal inflammation, 8 gynecomastia, 7 fibro-adenosis, 7 duct papillomas, 3 adipose tissue, 2 granulomatous change due to cyst/duct rupture, 2 tubular adenomas, 2 duct carcinomas, 1 phylloides tumour and 1 Atypical Lobular Hyperplasia. Dual pathology was seen in 3 patients (fibrocystic disease and duct papilloma). The size of the samples varied between  $10 \times 5 \times 3$  mm to  $80 \times 30 \times 3$  mm. One procedure had to be abandoned due to discomfort, 6 procedures caused haematomas that were managed conservatively and one milk fistula occurred that dried within 2 weeks.

This is a safe technique for diagnosis and treatment of benign breast conditions. But longer term follow up is awaited.