



Mr Dibyesh  
Banerjee

- Consultant  
Breast Surgeon

# One Stop Breast Clinic

## And a Novel Technique for Management of Early Breast Cancer

Breast lumps and changes can be worrisome symptoms for our patients, predominantly in the female population but also in males. Many patients present with lumps but other symptoms that require investigation may include breast asymmetry, nipple retraction, nipple discharge, mastalgia and skin changes. With a steadily increasing incidence of breast cancer in pre-menopausal women, early diagnosis and prompt treatment has never been more important in this “pre-screening” age group.

### Differential diagnosis of a breast lump includes:

- Fibroadenoma  
*(most commonly <40 years old, mobile smooth mass)*
- Fibrocystic breast  
*(mobile mass, fluctuates with menstrual cycle)*
- Fat necrosis  
*(trauma or previous surgery, firm mass irregular border)*
- Intraductal papilloma  
*(nipple discharge, mass not always palpable)*
- Invasive breast cancer
- Ductal carcinoma in situ  
*(mass may be present, Paget's disease of breast, nipple discharge)*

### Rarely:

- Phylloides tumour
- Adenoma

### What do women worry most about?

Most patients are worried about cancer particularly when they feel a lump. This may be influenced by friends or family that may have recently undergone breast cancer treatment or 'scare'. Nine out of ten breast lumps tend to be benign – however, they require a “triple assessment” prior to such a diagnosis being made.

### What is a 'One Stop Breast Clinic'?

This is an outpatient clinic specifically for patients with any breast related symptom, and so called to indicate that all the diagnostic assessments and tests can be completed in one visit. The entire process can take less than an hour, depending on the time of day and availability.

## Who would it benefit?

The One Stop Breast Clinic is ideal for busy professionals, including mothers and carers, who wish to have all diagnostic investigations completed in one appointment. It relieves anxiety and can reassure over 90% of the patients with instant results. On the other hand, it also reduces the time to diagnosis of a breast cancer, making sure any treatment that is needed can be started straight away.

## How is the triple assessment carried out in the One Stop Breast Clinic?

The patient is seen by the Specialist Breast Surgeon who will perform a Clinical Assessment comprising a full history and examination to guide the necessary imaging. The Radiological Assessment, in the form of breast ultrasound scan performed by a Consultant Breast

Radiologist, and a mammogram (for age 40 and over) is then assessed. The Radiologist may also carry out a fine needle aspiration or core biopsy (for the Pathological Assessment), using local anaesthesia and under image guidance. There is good evidence to suggest that when all three modalities are concordant, the degree of diagnostic accuracy exceeds 95%.

Most patients will be reassured that their lump is benign and no further diagnostic intervention is required. Some patients may wish to have operative management of their benign lump for pain, discomfort or for unresolved anxiety.

*The  
One Stop  
Breast Clinic is  
ideal for busy  
professionals*



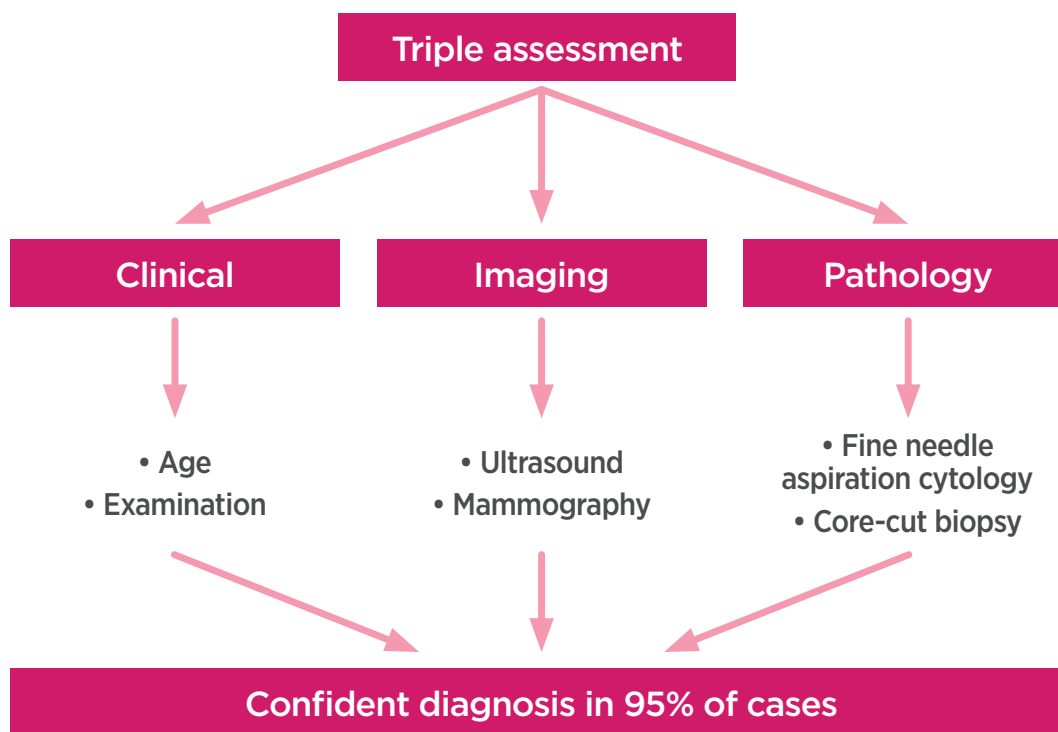
If the investigations reveal a more sinister cause of symptoms, this is usually confirmed within 2-5 working days and the patient informed of the diagnosis in the presence of a Breast Care Nurse. The findings are discussed in the MDT (multidisciplinary team) meeting to formulate an individualised treatment plan. A consultation is then arranged with the patient to discuss potential operative and other management, with the support of a Breast Care Nurse.

### What happens if one is diagnosed with breast cancer?

Surgery is the mainstay for treatment of early breast cancer. Adjuvant chemotherapy treatment may be required in some patients, especially for high grade

tumours and, if the axillary lymph nodes are involved with tumour cells. Breast radiotherapy is offered to most women undergoing breast conserving surgery and some patients who have had a mastectomy. Endocrine treatment is given to all patients who have oestrogen and/or progesterone positive tumour.

The primary goals of surgery includes complete resection of the primary tumour, with negative margins to reduce the risk of local recurrences, and pathologic staging of the tumour and axillary lymph nodes to provide necessary prognostic information. Several different types of operations are available.





Pre op - needing bilateral mastectomy



3 months post op - bilateral nipple sparing mastectomy and ADM/Implant - single stage reconstruction. (surgery performed by Mr D Banerjee - Consultant Oncoplastic Breast Surgeon)

## Lumpectomy and mastectomy

Lumpectomy (or breast conserving surgery) is defined as complete surgical resection of a primary tumour, without the need to perform a total mastectomy - with a goal of achieving widely negative margins (ideally 1 cm). It may be performed with palpation guidance or with image guidance and is applicable in most patients with stage I or II invasive carcinomas.

A total mastectomy involves complete removal of all breast tissue to the clavicle superiorly, the sternum medially, the infra-mammary crease inferiorly, and the anterior axillary line laterally, with en bloc resection of the pectoralis major fascia. The following variants are performed:

- Modified radical mastectomy - A total mastectomy with axillary lymph node dissection (ALND)
- Radical mastectomy - A total mastectomy plus en bloc resection of the pectoralis major and ALND
- Extended radical mastectomy - A radical mastectomy with resection of the internal mammary lymph nodes
- Skin-sparing total mastectomy (SSM)
- Nipple-sparing total mastectomy (NSM)

## Is breast reconstruction performed at the same time as the mastectomy?

Post-mastectomy reconstruction may be immediate or delayed. Broadly, the options are as follows:

- Implant-based methods - Expanders and saline or silicone implants
- Autologous tissue-based methods - Transverse rectus abdominis myocutaneous (TRAM) flap, latissimus dorsi flap, deep inferior epigastric perforator (DIEP) flap
- A combination of the 2 methods

## A novel technique of breast reconstruction using xenograft (animal derived) tissue matrix

Acellular dermal matrix (ADM) has been used as a soft tissue replacement since its introduction in 1994. ADMs are soft tissue matrix grafts derived from porcine (pig tissue) or bovine (calf skin) created by a process that results in decellularization, leaving the extracellular collagen matrix intact. This matrix provides a scaffold upon and within which the patient's own cells can repopulate and revascularize the implanted tissue. Its utility has been demonstrated in various reconstructive techniques, particularly in burn, abdominal wall, and breast reconstruction.

The introduction of ADM has provided surgeons with alternative means of obtaining sufficient vascularized soft tissue to cover the implant, thereby alleviating some complications. The main advantages are:

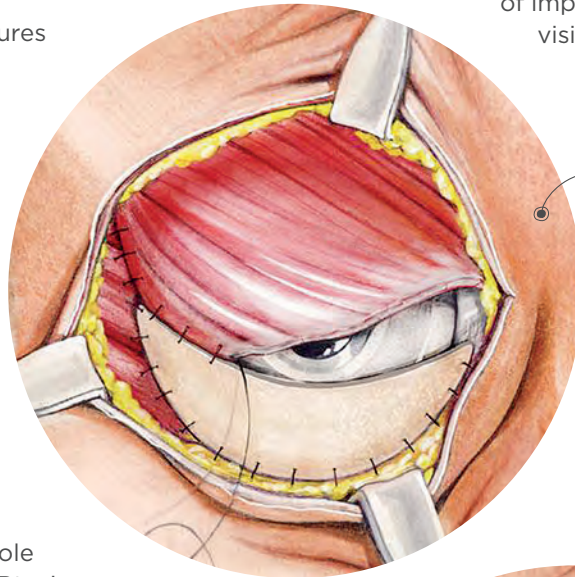
- Short operative time
- Quicker recovery
- Shorter length of stay
- Less painful than more extensive procedures
- No other scars e.g., on the abdomen or back

The purpose of using acellular dermis in expander-implant reconstructions is to improve on or maintain the essential components of breast aesthetics, including the infra-mammary fold, ptosis, and projection.

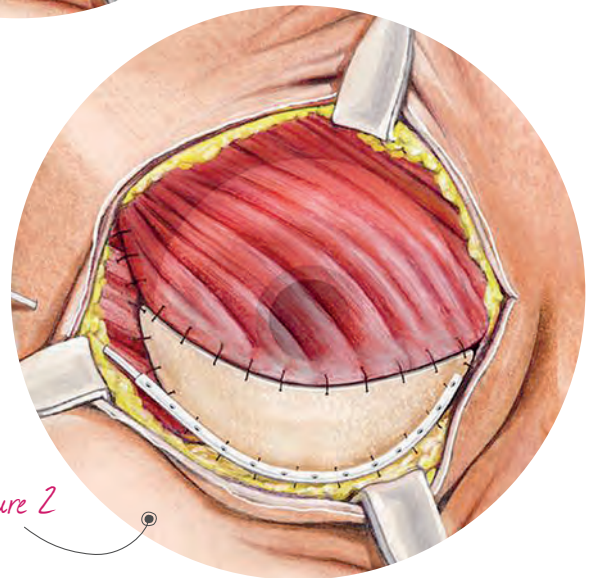
The infra-mammary fold is the inferior landmark of the breast. It is often altered during mastectomy and is a key component in achieving symmetry with the contra-lateral breast. Ptosis refers to drooping or overlapping skin in the lower pole that extends over the infra-mammary fold. Ptosis of the breast is caused by the effects of gravity on the breast tissue over time and is usually difficult to replicate with implants.

Finally, projection refers to the fullness of the breast, as measured by the distance from the chest wall to the most anterior point, usually the nipple. Initially, in the setting of tissue expanders, projection is less than was present with the original breast mound. The original projection may be restored with expansion, especially if the nipple is spared at the time of mastectomy.

The inferior border of the matrix is used to recreate the infra-mammary fold (see **fig 1**). The superior border is attached to the dis-inserted pectoralis major to create a complete subpectoral - subgraft pocket for expander placement (see **fig 2**). The acellular dermal sling provides numerous potential benefits - complete implant coverage reduces the risk of implant exposure, extrusion, visibility, and palpability.



*Figure 1*



*Figure 2*