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Stereotactic Breast Biopsy

Mammography often picks up suspicious lesions, especially microcalcifications or areas of architectural distortion or small masses that cannot be palpated or seen on ultrasound. In this situation, a stereotactic biopsy of these lesions is the best way to understand their nature.

A special stereotactic attachment (Fig. 1) on the mammography machine allows us to correctly fix the coordinates to guide the biopsy needle accurately into the lesion.

A 14G gun is introduced under local anaesthesia to obtain multiple cores (Fig. 2). It is necessary to ensure that the microcalcifications have been truly biopsied and a specimen radiograph (Fig. 2D) of the biopsy cores is always obtained to confirm this.

A vacuum assisted biopsy (VAB) can be performed as well and multiple cores are obtained with a single

Fig. 1. Stereotactic attachment on the digital mammographic machine

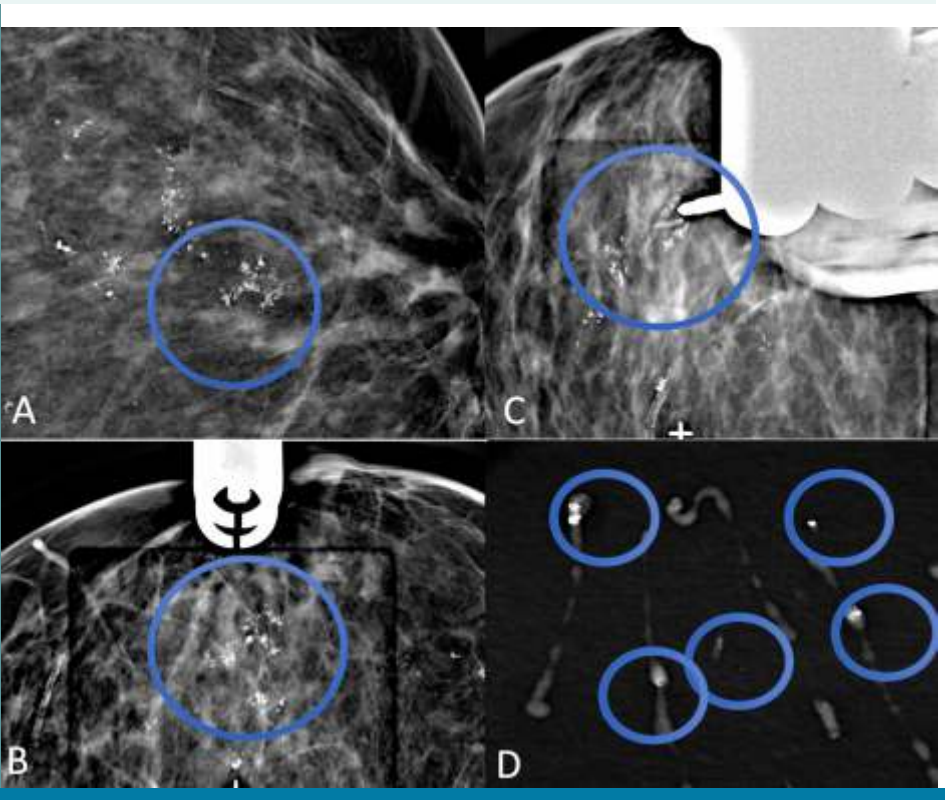

Fig. 2 (A-D): Mammogram (A) shows the suspicious cluster of microcalcifications (circle). Scout x-ray (B) at the time of biopsy shows the microcalcifications (circle) in the biopsy window. This image (C) shows the biopsy gun holder (circle) in place along the plane of the microcalcifications, ready to fire. Specimen X-ray (D) of the cores shows microcalcifications in most of the cores (circles).

At a glance:

- Non-palpable lesions, picked up on mammography are often difficult to assess without a biopsy
- Stereotactic breast biopsy using specialized equipment is often the only way to get an answer
- A marker can also be placed at the time of biopsy to help the surgeon locate the lesion for excision, if it turns out to be malignant.

insertion (Fig. 3). Standard precautions are taken as with any procedure and bleeding / hematoma formation is the main complication, more so with VAB.

A radio-opaque clip can be placed at the site of the biopsy after a VAB (Fig. 3C) to serve as a marker in case the microcalcifications turn out to be malignant to help the surgeon locate the lesion for excision as well as to confirm the site of biopsy in case of radiology-pathology discordance.

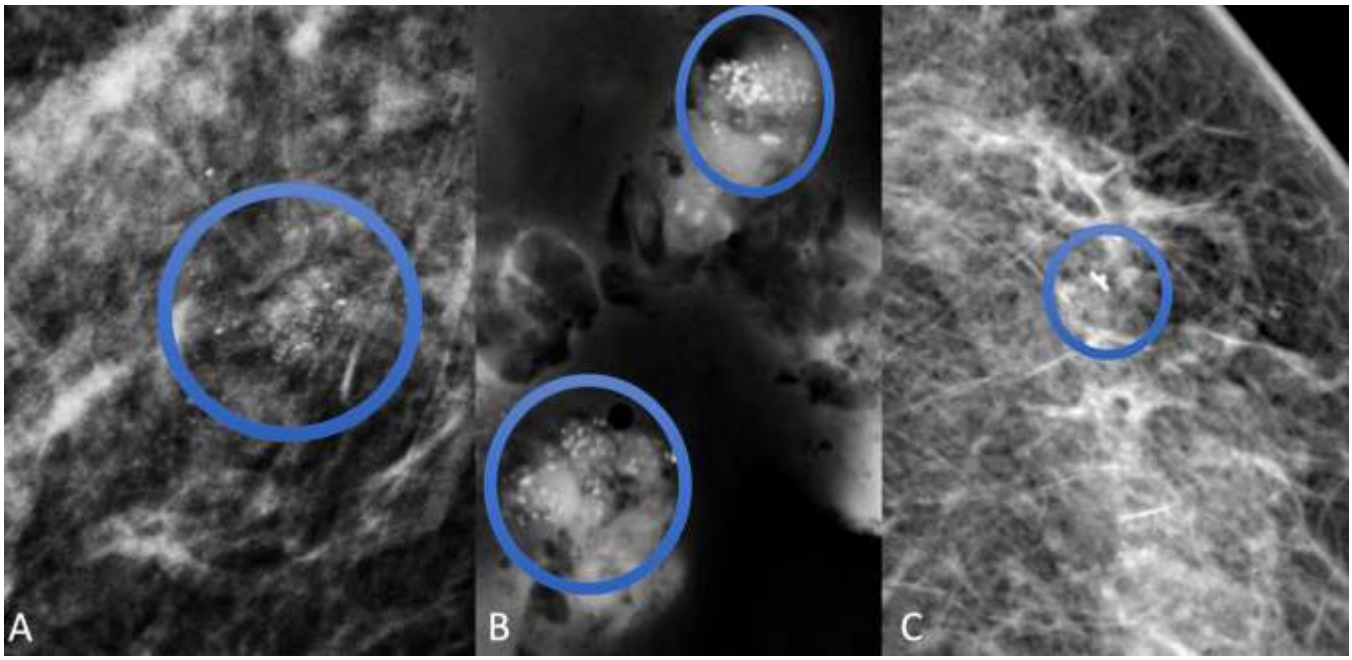

Fig 3 (A-C): Vacuum assisted biopsy (VAB) (A) done for a faint cluster of microcalcifications (circle). Specimen radiograph (B) confirms the microcalcifications in the biopsy cores (circle). The post biopsy mammogram (C) shows the clip (circle) placed at the site of the biopsy - all the microcalcifications have been removed on the VAB and are no longer visualized.

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