

Role of intervention radiology in evaluation of breast asymmetry: First institute experience in Minia university hospital .EGYPT.

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Introduction :

Breast cancer is the most common cancer affecting women. Early-stage cancer detection could reduce breast cancer death rate significantly. According to the guidelines, a non operative diagnosis should be possible in vast majority of invasive breast cancers. Also, the rise of the breast conservative surgery highlight the role of radiologist that becomes not only in diagnosis but in management. Imaging guided breast intervention primarily composed of breast biopsy which is done for BIRADs IV lesions or BIRADs 5. One of the challenging abnormalities at the breast is asymmetry which is an area at the breast of increased density in one breast compared to the corresponding areas in the opposite breast. Although most of breast asymmetry are benign yet, it can be of suspicious nature especially if they are changing or enlarging in size or there are other associated findings such as microcalcifications or skin involvement or suspicious lymph nodes. Not only is guided biopsy taken, the intervention radiology is not only in diagnosis but also in management. Only after confirmation on histopathology further treatment is planned based on hormonal receptors status of the tumor after the rise of chemotherapy this subsequently rise the role of breast conservative surgery , so that clip insertion is done at the suspicious asymmetry. After chemotherapy, this asymmetry may become non palpable or completely disappear , so that previously inserted clip will be the guide for the surgeon , where the role of the interventional radiology rise again to insert guided wire at the region of the clip , that will be the guide for the surgeon to be able to make breast conservative surgery . The guided wire also needed at the non palpable suspicious breast lesion, that are discovered by mammography and pathologically proven after biopsy , to guide the surgeon for BCS(Breast conservative surgery).

Methods:

50 female patients were included in the study , where sono- mammography was done , followed by biopsy . Clips insertion were done for the pathologically proven suspicious large, developing, global asymmetry before chemotherapy . Wire insertion was done for the suspicious pathologically proven focal non palpable asymmetry . Wire insertion also done after chemotherapy at the site of the clip. Digital mammography were performed using (FUJI Amulet Innovality) digital mammography device US Examination was done using Toshiba Aplio device with 10mhz linear probe.

Results:

25% of cases of focal asymmetry were malignant and had wire insertions. 45% of cases of developed asymmetry were malignant , had clips inserted followed by wires insertion.

Conclusion:

The intervention radiology became the main component of breast management especially after the rise of breast conservation surgeries .