Breast lesions are the most common lesions in women ranging from inflammatory lesions to malignant conditions. Fine-needle aspiration cytology is a safe and cost-effective, first line diagnostic tool in diagnosing breast lumps. FNAC helps in reducing the number of unnecessary surgeries in benign breast lesions.

MATERIALS AND METHODS:

This is prospective study includes 98 women patients and 2 male patients who are attending the FNA OP. Two samples were collected. One for CS preparation and other for LBC preparation. The following cytological parameters are compared. Cellularity, background material (blood, necrosis), informative background, monolayering, nuclear and cytoplasmic details according to Dey P et al.

RESULTS:

Cellularity in both the preparation showed moderate to high. In LBC preparation this is due to centrifugation of the collected sample. Clean background in LBC preparation. In CS method, there is bloody background which obscures the presence of the cells. Informative background is reduced or lost in LBC method. Whereas in CS method informative background is present. Monolayering is more in LBC method. Overlapping of cells are more common
in CS preparation. Nuclear and cytoplasmic details are equally comparable in both the LBC and CS preparation.

**CONCLUSION:**

Fine needle aspiration method is a safer and cost effective method for the diagnosis of breast lesions. Liquid based cytology of breast aspirates provides a better cellular preservation, less cellular overlapping and elimination of obscuring background when compared to that of Conventional smears. With continuous experience Liquid based cytology may become the main FNA diagnostic method in future.