

# Fine Needle Aspiration Cytologic Diagnosis of Lactating Adenoma: Report of two Cases

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**Key words:** Fine needle aspiration, Benign breast lesions, Lactating adenoma, Carcinoma breast

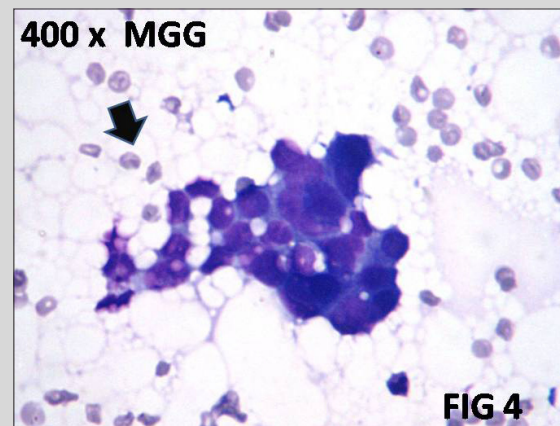
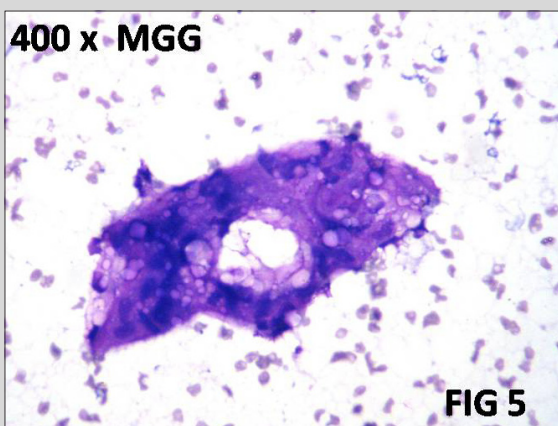
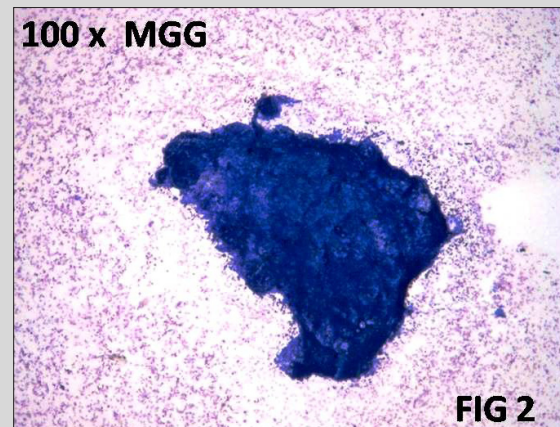
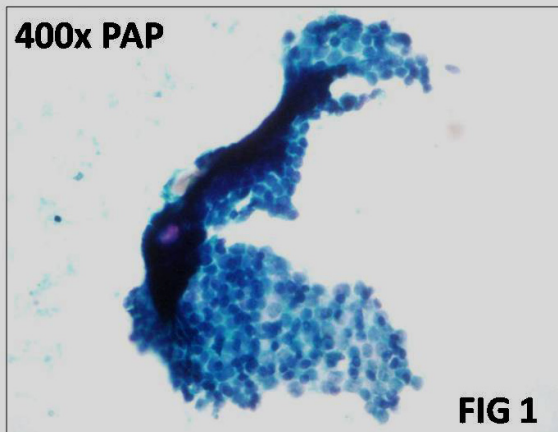
Sir/Madam,

Benign breast lesions are known to occur in pregnancy and in the post partum period, which are related to hormonal changes. Both de novo breast lesions and changes in the pre-existing benign conditions are well known. Lactating adenomas are one such group of tumours that can be diagnosed on cytology.

We are reporting cases of two lactating female patients aged 20 and 23 years, who presented with gradually growing lumps in their left breasts, which had one and two years of growth respectively. Examination of the breasts of these patients revealed that the lumps were well defined, firm and mobile. The breast lumps were subjected to fine needle aspiration (FNA), yielded scanty thin milky-white fluidy material.

The cytologic findings of both the patients showed cellular smears

with cohesive monolayers of monomorphic cells, exhibiting round nuclei with prominent single nucleoli and abundant foamy vacuolated cytoplasm. Only a minimal number of bipolar naked nuclei were appreciable in a granular proteinaceous background, that showed numerous tiny lipid vacuoles. Both the cases showed no nuclear/cellular atypia. On correlating the cytologic and clinical findings, a diagnosis of lactating adenoma was offered in these patients. The interesting fact that was found in these two cases was the presence of monomorphic population of cells and the absence of bipolar cells, which are the characteristic features of all benign breast lesions. Another factor to be considered was the cellularity of the smears, which usually favours diagnosis of a malignant lesion of the breast in cytologic aspirates. The clue to the diagnosis in these cases lay in the observation of the background foaminess of the cells and the scattered and few dispersed bipolar cells [Table/Fig-1,2,3 and 4].



[Table/Fig-1]: High Power View Showing Cohesive Monolayered Clusters of Benign Epithelial Cells Pap 400x

[Table/Fig-2]: Low Power View of the 2 Dimensional Clusters of Benign Epithelial Cells Mgg 100x

[Table/Fig-3]: Low Power View Showing the Magenta Matrix with Cells Having Vacuolated Cytoplasm Mgg 200x

[Table/Fig-4]: High Power View Showing the Lipoid Background (Block Arrow) Mgg 400x

Hence, I would like to conclude that an accurate diagnosis of lactating adenoma is possible on cytology, with a clinical correlation. FNA plays an important role in the appropriate management of patients with lactating adenoma; it thus helps in avoiding invasive procedures [1–4].

## REFERENCES

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