

**GIANT CELL REPARATIVE GRANULOMA: CYTOMORPHOLOGICAL DIAGNOSIS**

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**Abstract:**

Giant cell reparative granuloma is not a true neoplasm, rather a reactive process. It can behave aggressively if left untreated and can mimic malignant process. Hence, early intervention is essential. Herein, we present a similar case, where a simple diagnostic modality led to an early diagnosis of giant cell reparative granuloma, thereby preventing any further complications like facial disfigurement. The patient was treated conservatively and kept on follow up.

**Keywords: reparative granuloma, inner canthi, FNAC.**

Reparative giant cell granuloma (RGCG) is a reactive process, and not true tumor. These are rare slow growing lesion with head and neck region being the common site. It has been observed that it gets incited by any past history of trauma or inflammation<sup>[1, 2]</sup>. The present case highlights the importance of fine needle aspiration cytology of such swelling in clinical practice to prevent undue morbidity due to delayed or false diagnosis. A 55-year-old woman presented with a mass measuring 1 X 1 cm over the left inner canthus of eye for last one month. On examination, mass was soft, mobile and non-tender. No other complaints were found

in the patient. NCCT nose and PNS showed evidence of Right Maxillary Sinusitis. No bony involvement was found on radiography.

Fine needle aspiration cytological smears from left inner canthus swelling were highly cellular comprising of many large multinucleated osteoclastic giant cells along with singly scattered round to oval mononuclear cells with fine granular and moderate amount of cytoplasm. Background showed blood and occasional stromal fragments. Based on cytomorphological findings, a diagnosis of "Reparative Giant cell granuloma was made".

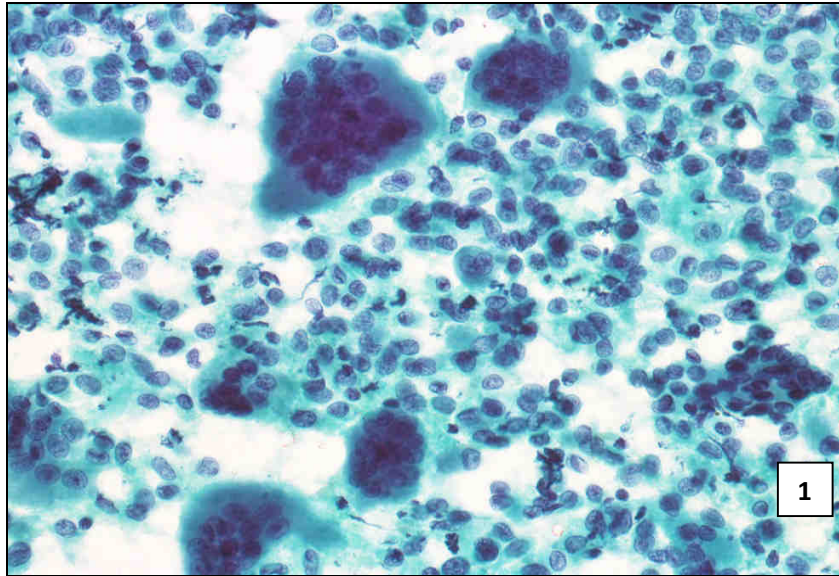


Fig 1: Photomicrograph showing large multinucleated osteoclastic giant cells along with round to oval mononuclear cells. Pap, 10X

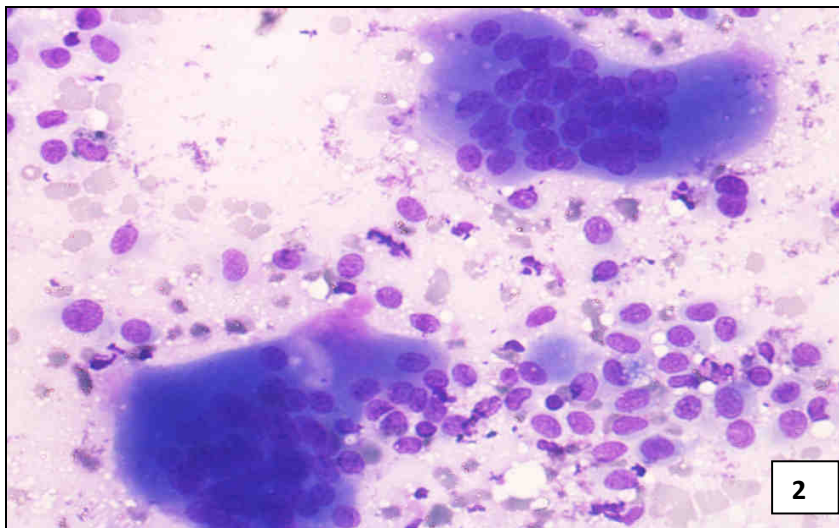


Fig 2: Figure showing singly scattered round to oval mononuclear cells with fine granular and moderate amount of cytoplasm along with osteoclastic giant cells. Giemsa, 20X

Though it is a benign lesion, sometimes it becomes aggressive and locally destructive. These lesions have obscured etiopathogenesis with varied clinical presentation and treatment modalities. The importance of early diagnosis is that treatment becomes simple and more

conservative. Various complications like facial disfigurement can be avoided<sup>[3]</sup>. Clinical importance of diagnosing these benign lesions is that they clinically mimic malignant lesions. They can behave aggressively but with bland histological appearance, pain, rapid facial swelling and high recurrence rate. Surgery is the most

accepted form of intervention. Surgical options can vary from simple curettage to en bloc resection<sup>[4]</sup>. However, radiotherapy for these lesions is contraindicated.

In the present case, lesion was noted only in the soft tissue. No invasion was seen in bony part. Non-surgical modalities like daily systemic dose of calcitonin and intralesional injection of corticosteroid can be given to the patient<sup>[4, 5]</sup>. Weekly intralesional injection of corticosterone is also a treatment option. This non-surgical approach is better for slow-growing lesion as noted in the present case. Larger lesions inevitably require surgery. The present study shows the importance of simple diagnostic modality like FNAC, which can prevent any unwanted complications in the patient.

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