



## Case Report

# Parachordoma in gluteal region : A Case Report

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### Abstract

A 26 year old man with a painful left gluteal mass was found to have parachordoma. It had been noted 5 months prior to the time of the examination. Physical examination revealed diffuse swelling with elastic consistency and ill-defined margins. The tumor mass was measured as being 12 x 10 cm. An incisional biopsy was performed and diagnosed as parachordoma by histopathological examination.

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### Introduction

Parachordoma (PC) was first reported by Dabska in 1977 [1,2], and represents an extremely uncommon soft tissue tumor consisting of cells with histology and ultrastructure similar to those of chordoma cells but with immunohistochemistry similar to that of chondroid tumor cells [3,4]. It is most frequently located in the upper or lower extremities [4,5]. Here a parachordoma was described originating in the gluteal region.

### Case report

A 26 year old man, day labor by occupation was admitted into the orthopedic unit, Rajshahi Medical College Hospital with complaints of swelling in the left gluteal region for five months. The patient experienced dragging pain during the last four months. He had been suffering from anorexia, weight loss during the last three months.

On general examination, the patient was found to be ill looking. He had been apprehensive as well.

On local examination, the mass was firm in consistency. It was measured at about 12 x 10 cm, the margin was ill defined, the overlying skin

appeared healthy. The lump was very painful. The provisional diagnosis was soft tissue tumor.

Interpretation of X-ray chest and lumbosacral region was unremarkable. All other investigation reports were insignificant.

MRI revealed a large heterogenous mass in left gluteal and presacral region possibly malignant mass with adjacent sacral and coccygeal bone involvement.

FNAC of the mass yielded the diagnosis of mesenchymal lesion of possible malignant potential.

The patient underwent incisional biopsy under local anesthesia. At surgery, the mass was deep enough. To reach the mass, splitting of muscle was done. It was invasive, had wide extension and ugly to look at. Large part of the tumor was resected. The skin was not involved. The postoperative course was uneventful.

### Pathological findings

On gross examination, two pieces of tumor tissue was submitted. It was gray white in color, the

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large one measured about 3.4×2.5cm. On cut section, it was firm in consistency. The lesion consisted in a polylobulated infiltrative tumor with myxoid areas.

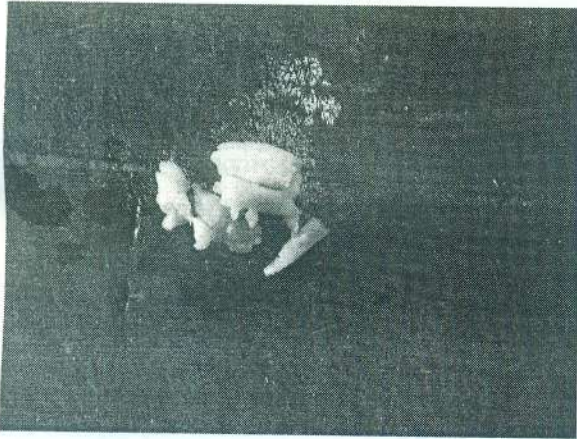


Fig 1: Gross appearance of the tumor.



Fig 2: Histological section showing nests of irregular cells with vacuolated cytoplasm in a myxoid matrix. H&E X 1600

### Discussion

Parachordoma is a very rare peripheral soft tissue tumor of unknown lineage, which has been described under either names, all of which imply a similarity to chordoma [6].

The tumor affects patients of all ages although there is a peak incidence in the second through fourth decades of life. Males are affected slightly more commonly than females [7]. In this case, the patient was male and 26 years old.

Folpe AL *et al* studied 30 cases [8]. They showed that the tumors presented as subfascial masses of the thigh (two cases), arm (three cases), chest wall (one case), and buttock (one case). In this case, it was presented as subfascial mass in buttock. Hirokawa M. reported a case of parachordoma occurring in the buttock of a 43 year old man [9].

Complete resection of the tumor with a clear free surgical margin can be considered as a curative treatment [10-14].

In this case, histopathological examination revealed small nests of pale staining cells resembling the cells of the notochord. All lesions had a population of cells with vacuolated cytoplasm resembling physaliferous cells found in chordomas with some myxoid areas. Its nature and relationship with soft tissue chondrosarcoma remain unclear [15, 16].

According to review of the literature WEBE B.M. *et al* studied a case of parachordoma [5]. In that study the parachordoma was reacted with antibodies to GFA, S-100, NSE and vimentins but not with antibodies to EMA, Keratin and NF.

Due to limitation, in this case immunohistochemical examination could not be done.

It is concluded that parachordoma is considered as indolent neoplasm with a potential for local recurrence. But the issue of the metastatic potential of this tumor is still poorly defined [17]. The parachordoma is an entity of its own. The immunohistochemical reactions indicate that the parachordoma is a neuroepithelial tumor with glial differentiation.

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