## DEGENERATED SOFT TISSUE LESION RESEMBLING A CHONDROMA

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**ABSTRACT:** A 42 year old male fisherman presented with a tender mass in the right side groin/root of the thigh. The entire episode followed a trauma. A biopsy specimen revealed a chondroma like lesion with necrosis. The final diagnosis made was Necrosis of Tendon.

**KEYWORDS**: Chondroma like lesion, Psuedochondroma.

**INTRODUCTION:** Chondromas, composed of hyaline cartilage are the second most common cartilage tumor of bone. They may occur in a medullary location (Enchondroma) or on the surface of the bone (Periosteal chondroma) <sup>1</sup>

**CASE HISTORY:** A 42 year old male came with difficulty in walking and pain aggravated during forward flexion and on attempt to sit on the ground. On examination, tender mass was present at the root of the thigh in the groin region. Clinical diagnosis of an abscess was made. MRI finding revealed Quadriceps Tendon Rupture. Under short GA, the skin was incised, which revealed a hemorrhagic mass. The mass was resected and debridement done; subsequently studied histologically

**MACROSCOPIC FINDINGS:** Container had multiple gray, black gelatinous mass partly firm in consistency, largest measuring  $3.5 \times 2.5 \times 0.5$  cm and the smallest measuring  $0.5 \times 0.5$  cm. Cut section – solid gray, white slimy areas along with gray, black areas are observed.

**MICROSCOPIC FINDINGS:** Chondrocytes seen as clusters against the background of hyaline cartilage matrix and myxoid degeneration. The cell clusters are distributed irregularly and areas of hemorrhagic necrosis present.

**DISCUSSION:** The patient had a similar episode five years back on the other side of the groin which was excised. A fisherman by occupation, he used to push cataraman and boats on sand and in the water front who can get hurt which is often ignored. The lesion histologically appeared like chondroma/well differentiated chondro sarcoma. But on learning the clinical history, a final diagnosis of Traumatic Necrosis of Tendon was made.

**NOTE**: The patient is well after one year follow up.

Extra skeletal chondroma, a benign cartilaginous tumour that occurs predominantly in hands and feet, has a benign clinical course.<sup>2</sup> Its predominant single site is fingers, where more than 80% of extra skeletal chondroma are found. Rare cases have been described in the dura,<sup>3,4</sup> larynx,<sup>5,6</sup> pharynx,<sup>7</sup> oral cavity<sup>8,9</sup> and skin.<sup>10</sup> It is often associated with tendons, tendon sheath or joint capsule<sup>11</sup>; unlike periosteal chondroma, it is located outside the periosteum.<sup>12,13</sup>

Extra skeletal chondroma usually manifest as slowly enlarging nodule. Tumour mainly affects adults 30 to 60 years of age and is rare in children. 14,15

Excised chondromas are usually well demarcated and are firm on palpation. Nearly all are small, seldom exceeding 3 cm in greatest diameter. They may be attached to a tendon or tendon sheath.

Microscopically, they vary considerably in appearance. About two thirds consist of mature hyaline cartilage arranged in more or less distinct lobular pattern. Some of these tumors are altered by focal fibrosis (Fibrochondroma) or ossification (Osteo chondroma). <sup>16</sup>

Others show myxoid change (Myxo chondroma). About one third display focal or diffuse calcification. Calcification tends to be more pronounced in centre than at periphery of the tumour lobules. That could be granuloma like proliferation of epitheliod and multi nucleated giant cells. This proliferation is most conspicuous at the tumour margin and inter lobular vascular channels. 17

**DIFFERENTIAL DIAGNOSIS:** Parachordoma and Myxoid chondrosarcoma can be considered. The possibility of Parachordoma is ruled out due to the absence of physaliferous bodies. Myxoid Chondrosarcoma also called chordoid sarcoma occurs in soft tissue, appears microscopically as stellate or round cell with moderate amount of cytoplasm distributed in cores, strands, nests within myxoid or chondroid background. No benign cartilage will be seen in it.

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#### MICROSCOPC PICTURES

Fig. 1 & Fig. 2: Chondrocytes along with degenerated fibro collagenous tissue.

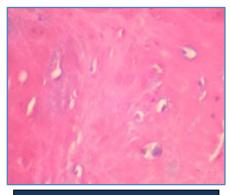


Fig. 1: H & E STAINING 10X

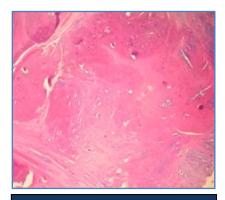


Fig. 2: H & E STAINING 20X

Fig. 3 & Fig. 4: Mature hyaline cartilage with areas of necrosis.



Fig. 3: H & E STAINING 10X

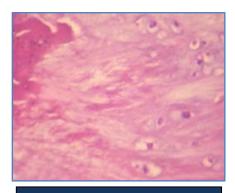


Fig. 4: H & E STAINING 20X

Fig. 5: Benign collection of lacunar cells in an area of necrosis.

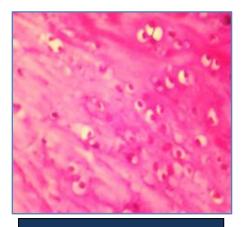


Fig. 5: H & E STAINING 20 X

### All the microscopic pictures were taken using:

Nikon Coolpix Model 8400 X - Indicates the power of objective Stain used is Haemotoxylin and Eosin

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