Pleomorphic Liposarcoma in a ten year old Child

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Introduction

Liposarcoma is the second most common soft tissue sarcoma in adults. It is extremely uncommon in the pediatric age group. Although many cases so diagnosed in children in the past are in reality examples of lipoblastomatosis, several indubitable cases of liposarcoma have been recorded in adolescents and children. In children under ten years of age, it is extremely rare. Majority of liposarcomas in children are myxoid liposarcomas, while the pleomorphic subtype is exceptional. We report a case of pleomorphic liposarcoma in a 10 year old child.

Discussion

Liposarcoma of any type are rare in children, but pleomorphic subtype is exceptional. Only a handful of cases are reported in literature. These cases occurred in neck, shoulder, inner chest wall, roof of mesentery, finger and urinary bladder. In our case, the tumor was located in the left lower extremity. To our knowledge, this is the first report of a childhood pleomorphic liposarcoma originating in this anatomic location.

Histological diagnosis of pleomorphic liposarcoma depends on the presence of pleomorphic malignant lipoblasts. These were easily identifiable in this case. Pleomorphic liposarcoma must be distinguished from poorly differentiated myxoid liposarcoma. The diffuse distribution of pleomorphic lipoblasts and the absence of myxoid, spindle cell and round cell areas made this distinction possible. In this case, tumour cells were positive for immuno histochemical stain S100 protein. This is usually seen in liposarcoma, although more importantly it excludes the diagnosis of malignant fibrous histiocytoma.

References