Metastatic Neuroblastoma Involving The Distal Third Of The Humerus

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Citation

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Abstract

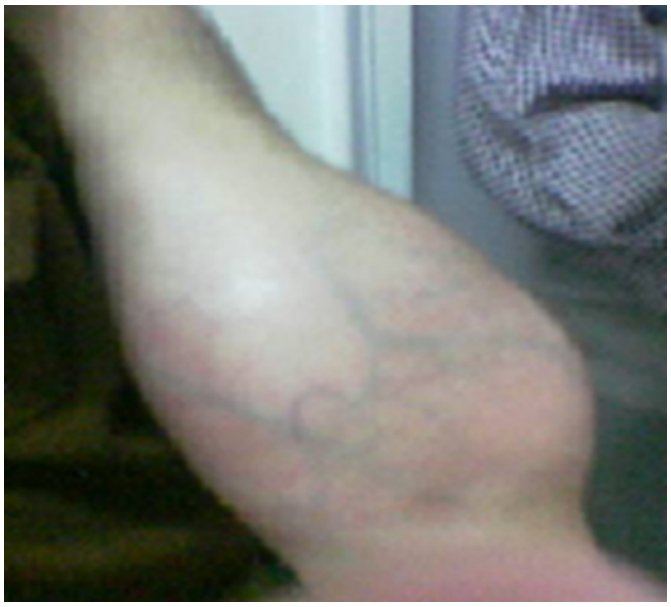
Neuroblastoma is predominantly a tumor of early childhood with two thirds of cases presenting in children younger than 5 years. Neuroblastoma originates in adrenal medulla or the paraspinal sites where sympathetic nervous tissue is present. The most common symptoms are due to a tumor mass or to bone pain from metastases. There is involvement of bone marrow in 70% of cases and involvement of bone in 56% of cases.

CASE REPORT

3 years old child presented in hospital with swelling(19 16 cms) in the left arm of three months duration (Fig.1).

Figure 1

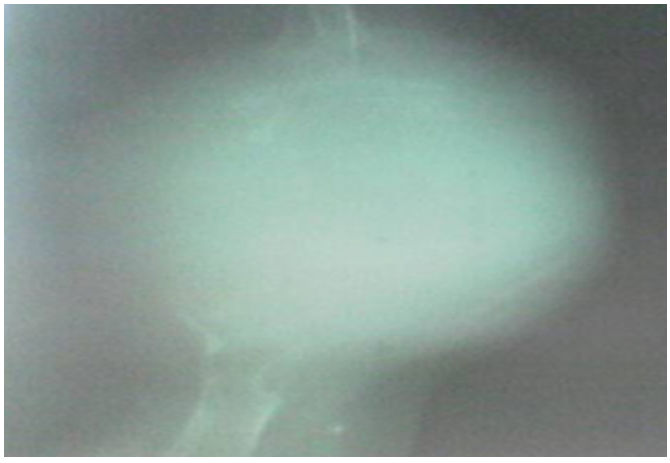
Figure 1: Metastatic Neuroblastoma involving left distal humerus.



Swelling started after sustaining trauma of left humerus which was managed by local practitioner fifteen days prior to presentation in hospital. Swelling increased tremendously in size. There was no history of fever and pain. Swelling was fusiform in shape and overlying skin was shiny and erythematous with prominent veins. Temperature over the swelling was slightly raised with mild tenderness. The swelling was hard in consistency, overlying skin was free but muscles were adhered and swelling was immobile. Regional lymph nodes were not palpable and distal neurovascular status was normal. Radiographs revealed diffuse destruction of the distal humeral shaft and metaphyseal region (Fig.2).

Figure 2

Figure 2: showing destruction of distal humeral shaft and metaphyseal region.



The elbow joint was free and there was diffuse increase in soft tissue shadow.

Ultrasonogaphy revealed a mass in suprarenal area, which was confirmed on CT scan as primary neuroblastoma. FNAC and TISSUE biopsy confirmed the diagnosis.

DISCUSSION

Metastatic involvement of bones takes place in 56% cases of

neuroblastoma [4] . Children of any age with localized neuroblastoma and infants younger than 1 year with advanced disease and favourable disease characteristics have a high likelihood of long-term, disease-free survival.

Older children with advanced-stage disease, however, have a significantly decreased chance for cure despite intensive therapy [2] . Aggressive multiagent chemotherapy has even resulted in a 2-year survival rate of approximately 20% in older children with stage IV neuroblastoma [1] . Children with neuroblastoma rarely present with paraneoplastic neurologic findings. Some neuroblastomas cannot be differentiated from other small round cell tumors of childhood, such as lymphomas, primitive neuroectodermal tumor, and rhabdomyosarcoma by conventional light microscopy [3] . The parents of the patient were told about the poor prognosis and left shoulder disarticulation was done and the patient was referred to surgical oncology department for further management of the tumour

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