

A Challenge to diagnose Neuroblastoma

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INTRODUCTION:

Neuroblastoma is a malignant tumour that develop from sympathetic neural tissue which commonly from adrenal and spinal cord^[1]. It accounts for 8 to 10% of all childhood carcinomas. Prognosis is highly variable and often age dependent.

REPORT:

12 year-old girl presented with sudden right leg swollen,pain and limping gait. Radiologically showing right fibula fracture with lytic lesion and periosteal reaction(figure1).Further images of CT scan and MRI point towards Ewing's sarcoma as aggressive right leg soft tissue lesion with mass effect, local infiltration and pathological fracture of right fibula with suspicious metastasis enlarged right inguinal, right common, external and internal iliac lymph nodes.HPE have proven neuroblastoma in view of malignant round blue cell, arranged in rosette and psedo rosette and present of neuroendocrine vascular differentiation which classically seen in neuroblastoma.

Patient was responded well for COJEC chemotherapy induction 3 months after the presentation (figure 2).

DISCUSSION:

With the limited knowledge,neuroblastoma are diagnosed 36% under the age of 1 and 89% under the age of 5^[2],hence it is hard to diagnose neuroblastoma in the first place for this girl. The evidence of pathological bone fracture and radiological aspect of osseous lesion and no other primary lesion detected had strongly suggestive of primary bone tumour.In neuroblastoma, even small sized tumour may have already caused widespread metastasis when first detected and less than 25% are localised to one site when diagnosed^[3].

Lastly,with the help of histopathology,it had proven neuroblastoma as final diagnosis and avoid the mismanagement in this case.

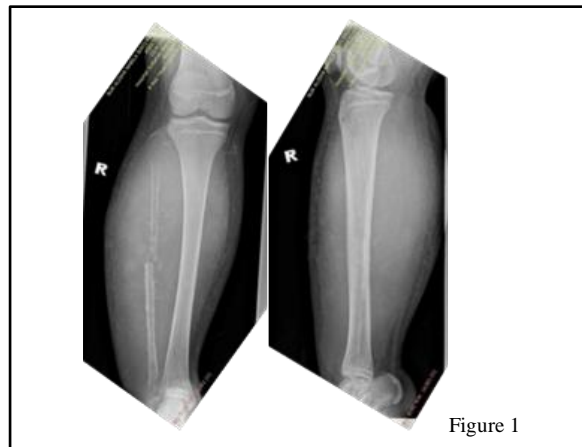


Figure 1: Xray of right tibia and fibula

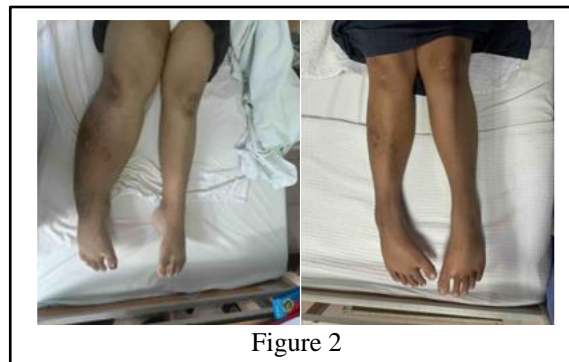


Figure 2: Pre and post chemotherapy

CONCLUSION:

Prompt diagnosis is paramount to initiate proper planning and management of neuroblastoma.

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