

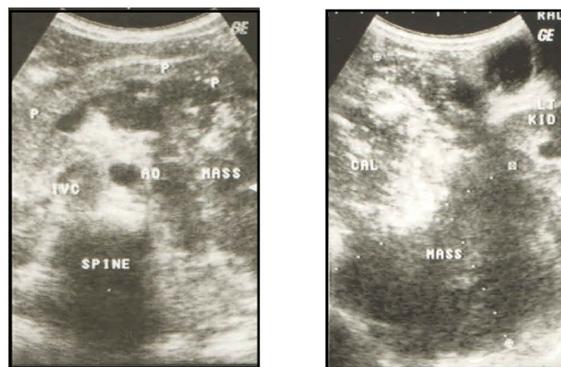
## Neuroblastoma - A Common Retroperitoneal Tumor in Children

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Neuroblastoma are solid extracranial tumors that commonly affects children . They account for nearly 8-10% of all cancers in children and arise from undifferentiated neural crest precursor cells that differentiate into sympathetic nervous system. Commonest location is abdomen (65%) while least is the cervical(5%) (1). Mostly they are sporadic while in some there is a familial association with autosomal dominant inheritance (2).

A six year girl was referred for ultrasonographic examination of abdomen with history of pain abdomen and vague mass upper abdomen . The examination of abdomen revealed heterogenic retroperitoneal mass in left suprarenal area with foci of calcifications displacing left kidney . They mass extended over the midline to the aorta (*Fig 1,2*). Other organs were normal. Histopathology examination latter on proved it to be neuroblastoma.

Ultrasonography has relative role in evaluation of retroperitoneal masses but the vascular invasion can be well demonstrated . CT and MR imaging play important role in demonstrating characterization , extent and involvement of adjacent or distant structures (3) .Retroperitoneal masses are either mesodermal , neurogenic germ cell ectoderm or lymphatic in origin . Children have different spectrum than adults . Neuroblastoma , paraganglioma , rhabdomyosarcoma , benign teratoma and lymphoma are common tumors in children. Coarse , amorphous , mottled calcification , crossing of midline encasement of great vessels and displacement of kidney are ultrasonographic findings in



**Fig. 1 & 2 Abdomen Ultrasonography Revealing Heterogenous left Retroperitoneal Mass with Foci of Calcification Extending Over the Midline Posterior to the Pancreas**

neuroblastoma. Paraganglioma have increased catecholamine levels. Sarcoma are large with heterogeneous appearance . Lipoblastoma have visible fat contents . While teratoma can be cystic , solid or mixed with fluid,fat , fat-fluid level with calcification. Lymphomas are more homogenous and rarely have calcification and necrosis.

### References

- 1 Magu S, Mishra DS, Gulati SP, Marwah N ,Kakkar V, Sukhija R Case report of primary cervical neuroblastoma with intracranial extensions in 7 year male. *Ind J Radiol Imaging* 2000;10:31-2
- 2 Haitao Zhu, Xianmin Xiao, Shan Zheng, Yiping Shen, Bai-Lin Wu. Genetic Prognostic Markers in Neuroblastoma *N A J Med Sci* 2010;3(3):123-127.
- 3 Yufeng Xu, Jichen Wang, Yun Peng , Jinjin Zeng- CT characteristics of primary retroperitoneal neoplasm in children. *Eur Jour Radiol* 2010,76(3): 321-28.

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