**Intraspinal Neuroblastoma**

Joseph Junewick, MD FACR

03/15/2009

**History**

5 month old with failure to thrive and progressive lower extremity dysfunction.

**Diagnosis**

Neuroblastoma

**Discussion**

Neuroblastoma is the most common extracranial solid neoplasm in childhood. It can arise anywhere along the sympathetic chain from primitive pleuripotential sympathetic cells in the neural crests. The 3 classic histopathologic forms in increasing degrees of maturation are neuroblastoma, ganglioneuroblastoma and ganglioneuroma. Neuroblastoma has an incidence of 10.5 cases per million per year. The average age at diagnosis is 22 months with approximately one-third cases diagnosed before 1 year of age. The abdomen, evenly divided between the adrenal gland and the paraspinal sympathetic chain, account for two-thirds of the cases. The incidence of metastatic disease increases with age (~25% < 1 year of age and ~75% over 1 year of age).

Anatomic (CT and MRI) and metabolic (MIBG and FDG) imaging are important in the staging and surveillance of disease.

**Findings**

CT-Expansile intraspinal neoplasm extending through neural foramina into the paraspinal regions. MRI-Sagittal T2 and Axial T1, T2 and post-gadolinium T1 images reveal an intermediate signal long segment intraspinal mass, obliterating the thecal sac. Note the scalloping of the posterior aspects of the vertebral bodies and enlarged neural foramina.

Pathology-Poorly differentiated neuroblastoma, stroma poor, low MKI (mitotic karyorrhectic index).

**Reference**

Sponsored By

Disclaimer
This teaching site is partially funded by an educational grant from GE Healthcare and Advanced Radiology Services, PC. The material on this site is independently controlled by Advanced Radiology Services, PC, and GE Healthcare and Spectrum Health have no influence over the content of this site.

Content Download Agreement
The cases and images on this website are owned by Spectrum Health. Permission is granted (for nonprofit educational purposes) to download and print materials to distribute for the purpose of facilitating the education of health professionals. The authors retain all rights to the material and users are requested to acknowledge the source of the material.

Site Disclaimer
This site is developed to reach healthcare professionals and medical students. Nothing this site should be considered medical advice. Only your own doctor can help you make decisions about your medical care. If you have a specific medical question or are seeking medical care, please contact your physician.

The information in this website is provided for general medical education purposes only and is not meant to substitute for the independent medical judgment of a physician relative to diagnostic and treatment options of a specific medical condition. The viewpoints expressed in these cases are those of the authors. They do not represent an endorsement. In no event will Advanced Radiology Associates, PC, Spectrum Health Hospitals (Helen Devos Children's Hospital) or GE Healthcare be liable for any decision made or action taken in reliance upon the information provided through this website.