Posterior Fossa Syndrome

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Definition

Posterior fossa syndrome is characterized by a heterogeneous presentation of symptoms following cerebellar tumor resection in children. Cerebellar mutism, followed by a period of significant dysarthria, is the most common aspect of this syndrome. Other well-documented symptoms include emotional lability, behavioral disturbance, and bizarre personality changes. Oropharyngeal dyspraxia, impaired initiation of complex voluntary movements, oculomotor apraxia, and psychomotor retardation have also been reported (Pollack 2001). These symptoms normally begin 1-5 days postoperatively and typically resolve over the following months. The syndrome is thought to be attributed to lesions of the dentate nuclei or vermis. Large midline tumors that require incision of the vermis are at greatest risk for the postsurgical development of posterior fossa syndrome (Turkel et al. 2004). In a

prospective series examining medulloblastoma resection outcome, one quarter of patients developed symptoms consistent with posterior fossa syndrome, and 92% of these were characterized as moderate to severely affected (Robertson et al. 2006).

Cross-References

► Cerebellar Mutism

References and Readings

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Turkel, S. B., Chen, L. S., Nelson, M. D., Hyder, D. H., Gilles, F. H., Woodall, L., et al. (2004). Case series: Acute mood symptoms associated with posterior fossa lesions in children. *The Journal of Clinical Neuropsychiatry and Clinical Neurosciences*, 16, 443–445.