NEUROMUSCULAR DISORDERS

NEOPLASTIC CAUSE OF CONGENITAL BRACHIAL PLEXUS PALSY

Two patients with a neonatal onset of arm weakness and neoplastic involvement of the brachial plexus are reported from the Miami Children's Hospital, FL. The initial diagnosis was an obstetric brachial plexus palsy. 1). A 7-day-old female presented with a left supraclavicular malignant rhabdoid tumor and left proximal arm weakness, first noted at 2 days of age. Weakness quickly progressed to involve the whole arm within 3 days. MRI showed involvement of the brachial plexus, 4th and 5th cervical roots, and the spinal canal. 2). A 28-month-old male presented with scratch marks over the right upper extremity, beginning at 4 months of age, and a slowly progressive right arm weakness, first noted at 3 weeks of age. MRI revealed a plexiform neurofibroma of the right brachial plexus, extending from all cervical to the 5th thoracic spinal roots. (Alfonso I, Papazian O, Prieto G, Alfonso DT, Melnick SJ. Neoplasm as a cause of brachial plexus palsy in neonates. Pediatr Neurol April 2000;22:309-311). (Respond: Dr Israel Alfonso, Department of Neurology, Miami Children's Hospital, 3100 SW 62nd Ave, Miami, FL 33155).

COMMENT. In obstetric brachial plexus palsy, the weakness is apparent at birth and is non-progressive, and the birth process is usually complicated by shoulder dystocia. In infants with brachial plexus palsy caused by neoplasm, the onset of weakness is after the first day, the course is progressive, and the delivery is usually normal and free from traumatic injury. The diagnosis is confirmed by MRI.

SPINAL LESIONS

NEONATAL SPINAL NEUROENTERIC CYST

A neonatal spinal neuroenteric cyst (NC), presenting with persistent fever and acute myelopathy at the age of 10 days, is reported from the University Catholique de Louvain, Brussels, Belgium. Chest X-ray showed enlargement of interpeduncular spaces, vertebral body clefts, and a paravertebral mass. Ultrasonography of the spinal canal revealed an anterior cystic mass. MRI confirmed the spinal malformation and its connection through the vertebral defect with the prevertebral, retro-aortic cystic mass. At 8 weeks of age, the infant developed acute hypertonia, ankle clonus, and paresis of the lower limbs and left arm, and urinary retention. Thoracic laminectomy at T6 to T9 for partial resection of the intradural cyst was followed, at age 8 months, by excision of the mediastinal component of the cyst. At 18 months, fever, paraplegia, and neurologic bladder persisted while motor function of the left arm improved. The cyst consisted of smooth muscle entrapping cavities lined by digestive and respiratory epithelia, and chronic inflammatory cell infiltration. (Kadhim H, Proano PG, Saint Martin C et al. Spinal neuroenteric cyst presenting in infancy with chronic fever and acute myelopathy. Neurology May 2000;54:2011-2015). (Reprints: Dt Guillaume Sebire, Service de Neurologie Pediatrique, Cliniques Universitaires Saint Luc, Avenue Hippocrate 10/1068, 1200 Brussels, Belgium).

COMMENT. The authors refer to 13 additional cases of infantile neuroenteric cyst reported in the literature. A sudden spinal cord compression is precipitated by an increase in size of the cyst due to inflammation and retention of mucous