Neurosurgery Abstracts

Title: ADULT TETHERED CORD: A RETROSPECTIVE STUDY OF CLINICAL PRESENTATION AND INDICATION FOR SURGERY

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Background: Surgery for tethered cord due to lumbosacral lipoma, tight filum and secondary tethering after myelomeningocele repair is usually performed in children. In recent years, tethered cord is recognized more frequently in adults. However surgical indications are unclear and because many patients have long-standing deficits, advantages of surgery may be lower than in children.

Method: We retrospectively studied medical records of 33 adult patients with tethered cord who consulted the department of neurosurgery between 1996 and 2008. Twenty-six patients were operated, sometimes after a period of observation, in 7 a conservative management was proposed. The anatomy of the lesion causing tethering was determined. Indications for surgery and reasons for not operating were studied. The data were compared to a similar earlier study in children.

Results: Tethered cord was caused by lipoma in 19 patients, tight filum in 3 patients and was secondary to meningomyelocele repair in 10. One patient had diastematomyelia. In retrospect many patients already had long standing deficits: 68% had sphincter disturbances and 60 % had lower limb motor deficits several years before the diagnosis. Orthopaedic consequences were also frequent: Foot deformities in 41 % and scoliosis in 34 %. In 42% the surgical indication was lumbar and/or sciatic pain, in 30% deterioration or occurrence of sphincter disturbances.

Conclusion: Most adults patients operated for tethered cord syndrome have long-standing and multiple deficits. The most common indication for surgery is pain. Compared to children, surgery for secondary tethering seems less frequently performed.