

Spinal Dysraphisms of the Cervicothoracic Region in Childhood

Çocukluk Çağı Servikodorsal Yerleşimli Spinal Disrafizm Olguları

KEYWORDS: Cervical meningocele, Spinal dysraphism, Childhood, Adulthood

ANAHTAR SÖZCÜKLER: Servikal meningesel, Spinal disrafizm, Çocukluk çağı, Yetişkinlik çağı

I have read with great interest the paper by Orakdogen M et al. entitled "Spinal dysraphisms of the cervicothoracic region in childhood"(1). In 2008, I have reported a series (five cases) of cervical congenital midline meningoceles in adults. In my series, all patients had lived a symptom-free childhood without any restriction of cervical movement. In my operations I have seen two different types of attachments. The filamentous attachments were short and attached mainly to the congenitally separated dural leaves. The stalk of the cervical meningocele originated from the dural leaves and made a cone-shaped firm structure, connected to the subdural space by a thin channel. Possible determining factors for neurological injury from cervical spinal meningoceles were also discussed in my manuscript (2).

In the present series two patients were 9 years old and one patient was 7 years old. Flexion-extension magnetic resonance imaging studies could also have been helpful in evaluation of these patients.

Orakdogen M et al. revealed that in their study the neurological examination and urodynamic studies were normal in all cases. However, they have not given any results of electrophysiological examination such as somato-sensorial evoked potentials (SEP) or electromyography (EMG) studies.

After publishing the first 5 cases I have seen three more adult cases with cervical meningocele. Two of them underwent surgery (one of them was operated by Duz B.) (Figure 1A,B,C,D).

I think that discussion of adulthood progression of these rare lesions is very important. We advise to perform surgery early to prevent

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Figure 1A: Photograph showing the meningocele located in the lower cervical region.

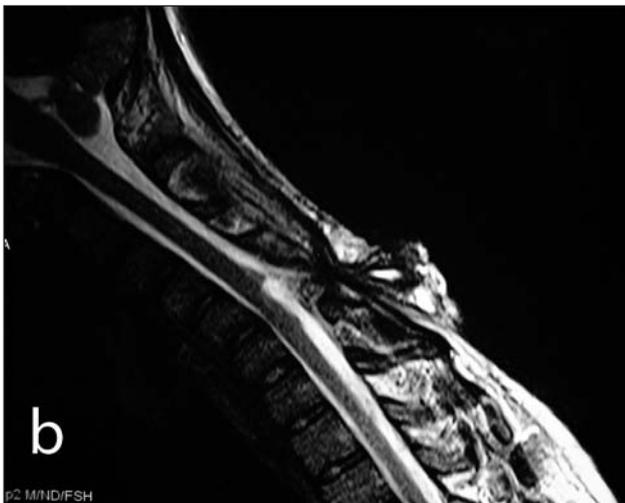


Figure 1B: T2-weighted cervical MRI in hyperflexion. Cervical meningocele at the level of the C5 is seen

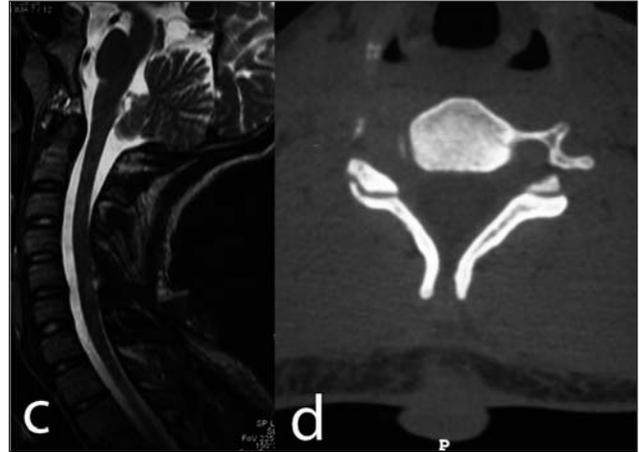


Figure 1C: T2- weighted cervical MRI in hyperextension. (D) CT scan of the adult case showing the spina bifida at the level of C5.

neurological decline. Most of the patients who survive into adulthood do not present neurological deficits. I have hypothetically proposed a biomechanical explanation for possible neurological deterioration in association with cervical meningoceles that is similar to the pathogenesis of cervical spondylotic myelopathy. Besides scientific discussion and pathogenesis of these lesions, before deciding the operation “One must remember that detethering the cervical spinal cord is associated with some risk, and that risk must be weighed against the risk of progression if the lesion is not immediately operated on” as Steinmetz MP commented on my previous manuscript.

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