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# Spontaneous resolution of a Chiari I malformation and cervicothoracic syrinx in a 9 years old girl with a 47° scoliosis responding favourably to bracing

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*from* 5th International Conference on Conservative Management of Spinal Deformities
Athens, Greece. 3–5 April 2008

Published: 15 January 2009

*Scoliosis* 2009, **4**(Suppl 1):O58 doi:10.1186/1748-7161-4-S1-O58

This abstract is available from: http://www.scoliosisjournal.com/content/4/S1/O58



## Background

Pediatric case reports support the spontaneous resolution of Chiari I and syrinx. We present a case of a 9 years old girl with a spontaneous regression of a cervico-thoracic syrinx and a complete spontaneous resolution of the Chiari I malformation after one year of bracing to treat her scoliosis.

## Case report

An 8 years old girl was first diagnosed with JIS. She presented a right thoracic single curve (Apex at T10) of 36° Cobb and ± 10° rotation. Normal sagittal configuration. MRI demonstrated a Chiari I malformation and a cervicothoracic syrinx (C4 to T9-10). She attended our clinic later showing a rapid progression of the Cobb angle to 47° Cobb. Absent superficial abdominal reflexes was the only neurological sign. Bracing with a RSC was indicated. After one year of treatment (in brace correction 47%) the scoliometer value reduced from a total value of 9.5° to 6°. Back asymmetry has dramatically improved. A second MRI showed a reduced syrinx and no Chiari I malformation.

## Discussion and conclusion

This is a first report of a case showing a temporary improvement of a conservatively treated scoliosis coinciding with a spontaneous resolution of a Chiari I malformation and a related cervico-thoracic syrinx. The mechanism of such a resolution is not clear. However this case supports the idea that the resolution of the Chiari I and its related syrinx would improve the prognosis of the associated scoliosis.

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