

Syringosubarachnoid shunt for syringomyelia associated with Chiari I malformation

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An 11-year-old girl with Chiari I malformation presented with a large cervico-thoracic syrinx (Fig. 1). There was poor clinical improvement 4 months after foramen magnum decompression. Subsequently, syringosubarachnoid shunting was performed, resulting in complete resolution of the syrinx and marked clinical improvement. The shunt was seen as a small tubular structure on MRI, with prominent flow artifact within the thecal sac near the shunt opening (Fig. 2).

Syringomyelia associated with Chiari I malformation can be treated by foramen magnum decompression, syringosubarachnoid shunting and syringoperitoneal shunting [1, 2]. Syringosubarachnoid shunting is a safe, effective and techni-



Fig. 1 Sagittal T2-W MRI, pre-shunting

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Fig. 2 Sagittal T2-W MRI, post-shunting

cally simple technique that is preferred for use with large syringes or for rapid progression of clinical symptoms [2]. The shunt catheter is identified on MRI as a tubular structure, usually along the posterolateral part of the cord, with flow artifact near the subarachnoid opening.

References

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