Cerebellar Syringocephaly Following Surgery for Chiari Malformation

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Figure Progression of Syringomyelia Toward Cerebellar Syringocephaly Following Posterior Fossa Decompression for Chiari Malformation

(A) Posterior decompression failure. (A.a) Chiari malformation with syringomyelia. (A.b) Foraminal arachnoiditis. (A.c) Progression toward syringobulbia. (B) Cerebellar syringocephaly. (B.a) Extension to the cerebellum. (B.b) communication and (B.c) CSF flow between cavities. (C) Resolution by cysto-peritoneal shunting. (C.a) Immediate postoperative CT scan. (C.b) 3-month and (C.c) 6-month postoperative MRI.

Extension of syringomyelia to the cerebral hemispheres, termed syringocephaly, is rare.^{1,2} We report the case of a 50-year-old woman who had undergone repeated posterior fossa decompression for Chiari malformation type I with syringomyelia, resulting in foraminal arachnoiditis. Two years later, she presented with cerebellar ataxia revealing a holocord progression of the syringomyelia, extending

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to the cerebellar hemispheres (figure, A). Millimetric T2-weighted and CSF flow sequences confirmed communication between cavities (figure, B). A cysto-peritoneal shunt was performed. Follow-up at 1 year demonstrated a marked improvement of cerebellar signs and complete radiologic regression of the cerebellar syringocephaly (figure, C).

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Author	Location	Contribution
Ismaël Mahazou, MD	University Paris-Saclay	Drafting/revision of the manuscript for content, including medical writing for content

Appendix (continued)

Author	Location	Contribution
Mohamed Choukri, MD	University Paris-Saclay	Major role in the acquisition of data
Fabrice Parker, MD	University Paris-Saclay	Major role in the acquisition of data
Steven Knafo, MD, PhD	University Paris-Saclay	Drafting/revision of the manuscript for content, including medical writing for content, major role in the acquisition of data, study concept or design, analysis or interpretation of data

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