

Resolution of Chiari & Syrinx After Hyperthyroid Treatment

Doctors from London have reported the fascinating case of a young woman with Chiari and a large syrinx, both of which resolved after treatment for hyperthyroidism. Specifically, a 17-year-old woman was seen for ongoing loss of temperature sensation in her arm. An MRI revealed a Chiari I malformation and a large syrinx that extended throughout her cervical spine into the top of her thoracic region. In addition, she was found to have an overactive thyroid. Decompression surgery was discussed, but the patient preferred to wait and so her overactive thyroid was treated with drugs over a period of time.

A follow-up MRI taken 8 months later showed a small reduction in both her syrinx and her Chiari. Then, a second follow-up MRI taken nearly 2 years later showed complete resolution of both. A final MRI taken another year later showed the woman was still Chiari and syrinx free.

Precisely how syringes form and how they are linked to Chiari is not known, but most theories involve changes to the dynamics of the circulating cerebrospinal fluid. Considering this, the authors point out that hyperthyroidism can affect intracranial pressure, which may have altered this patient's fluid dynamics and led to a syrinx.

Surprisingly, this is not the first case report linking hyperthyroidism to Chiari. In 2015, a Korean team reported on a 19-year-old woman with an enlarged thyroid and Chiari malformation who was suffering from headaches. Treatment of her thyroid condition resulted in her headaches going away, but the authors do not indicate if her herniation changed on imaging like in the case from England.

Source: Resolution of Large Cervico-Thoracic Syringomyelia Following Treatment of Thyrotoxicosis: A Case Report. Craven CL, Mullins S, Pradini-Santos L, Watkins LD. Cureus. 2023 Jul 24;15(7):e42372.

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