Syringomyelia associated with Chiari I malformation treated with foramen magnum decompression and duraplasty using a polyglycolic acid patch and fibrin glue: A case report.

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Abstract:

A 31-year-old woman presented with worsening numbness and pain in the arms and chest. Neurological findings at admission were decreased pain sensation and temperature sensation in the arms and chest. Magnetic resonance demonstrated a large cervical syrinx from the level of C4 to Th4 associated with Chiari I malformation. Occipital craniectomy and C1 laminectomy were performed for foramen magnum decompression. Intraoperative ultrasonography, performed after removal of the outer membrane of the dura mater at the level of the foramen magnum, revealed insufficient decompression. Therefore, the dura mater was completely opened and duraplasty was performed with a polyglycolic acid patch and fibrin glue. Sufficient decompression was thus achieved. The neurological symptoms and signs improved within the first postoperative month, and magnetic resonance showed a decrease in the size of the syrinx and no cerebrospinal fluid leakage. In patients undergoing foramen magnum decompression with duraplasty, the use of a polyglycolic acid patch and fibrin glue renders suturing unnecessary and avoids the common complications associated with suture duraplasty.