Cerebrospinal Fluid Seepage through Polyglactin 910 Dura Substitute Manifested as Spinal Extradural Collection of Fluid

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Following excision of pilocytic astrocytoma, a 12-year-old girl underwent posterior cranial fossa synthetic duraplasty with polyglactin 910 mesh. On the 8th postoperative day, unusual extradural collection was diagnosed by spinal magnetic resonance imaging. On the 14th postoperative day, cerebrospinal fluid leakage in the upper part of the postoperative wound was noticed. Unusual extradural collection detected by spinal magnetic resonance imaging was assumed to be the consequence of cerebrospinal fluid seepage and a warning sign of cerebrospinal fluid leakage following synthetic posterior fossa duraplasty. This case shows that polyglactin 910 mesh may be ineffective when used for posterior cranial fossa duraplasty in children, although it is considered as valuable as autologous tissue.

Key words: cerebrospinal fluid; cranial fossa, posterior; dura mater; magnetic resonance imaging; spinal fluid pressure