Secondary Trigeminal Neuralgia Caused by a Tentorial Dural Arteriovenous Fistula: A Case Report and Literature Review

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Abstract: Trigeminal neuralgia caused by a tentorial dural arteriovenous fistula has rarely been reported. The mechanism underlying the development of trigeminal neuralgia has been reported to be the compression of the root entry zone by the arterialized draining vein. However, the cases showing refractory or recurrent neuralgia could imply the presence of another underlying mechanism. We herein describe a case in which the arterialized draining vein and the superior cerebellar artery co-compressed the root entry zone of the trigeminal nerve. This case shows another pathophysiology of secondary trigeminal neuralgia caused by a tentorial dural arteriovenous fistula. Direct surgery should be considered for the treatment of such cases.

Key words: Trigeminal Neuralgia, Dural Arteriovenous Fistula, Tentorium, Superior Cerebellar Artery, Microvascular Decompression