Vertebrobasilar dolichoectasia

Vertebrobasilar dolichoectasia is a condition in which there is elongation and dilatation of the vertebral artery and basilar artery.

see Cerebral Arterial Dissections

Clinical features

Vertebrobasilar artery dolichoectasia may result in neural element compression anywhere along its course within the cervical region, the craniocervical junction or in the posterior fossa. The clinical syndromes most often observed include cranial neuropathy, bulbar palsy, myelopathy and cervical radiculopathy.

Hemifacial Spasm caused by Vertebrobasilar dolichoectasia [1].

see Craniofacial pain syndromes

Complications

Tortuous and dolichoectatic vertebrobasilar arteries can impinge on the brainstem and cranial nerves to cause compression syndromes.

Few studies have been reported that focus on cases of trigeminal neuralgia (TN) secondary to vertebrobasilar dolichoectasia (VD) and treated by microvascular decompression (MD).

A case is presented of trigeminal neuralgia caused by vertebral artery compression. An analysis of the microsurgical technique, as well as a systematic review of the literature about this uncommon nerve compression is performed, in order to investigate, by pooled case analysis, if MD is a good option for this type of patient.

A total of 7 studies were included for analysis, to which the present case was added, making a total of 56 patents. There were excellent results in 53 cases, and partial recovery in 3, with a mean follow up of 54 months. No major complications were found.

The good clinical results and absence of postoperative mortality or severe morbidity in our pooled case series lead us to recommend MD as the preferred treatment for TN caused by VD in patients in whom major surgery is not contraindicated [2].

Hydrocephalus after Vertebrobasilar Dolichoectasia

Hydrocephalus after Vertebrobasilar Dolichoectasia

Treatment

see Vertebrobasilar dolichoectasia treatment.

Case reports

A 33-year-old male with VBD diagnosed by multimodality imaging, who developed simultaneous abducens nerve and vestibulocochlear nerve symptoms and subsequently improved after blood pressure control treatment. This is the first report of such a vascular disorder resulting in simultaneous symptoms of the abducens and vestibulocochlear nerves. This study highlights that such a vascular anomaly should be considered when cranial nerve symptom is encountered, especially when multiple cranial nerves involved. Meanwhile, radiological evaluation of such neurovascular conflict using three-dimensional constructive interference in steady-state imaging is recommended [3].

1)
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2)
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3)
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