

TRIGEMINAL NEURALGIA CAUSED BY NEUROVASCULAR COMPRESSION IN YOUNG ADULT

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Introduction. Trigeminal neuralgia (TN) is a severe, sudden form of facial pain that can be debilitating if left untreated. Patients present with short periods of pain that can become more frequent and intense over time. It typically affects the elderly. However, the most common cause of compression in young adults is venous – isolated or associated with arterial nerve compression.

Case Description. A 25-year-old male with right trigeminal neuralgia complained of sharp, electric shock-like facial pain on the right side, which started 4 years ago. During the last month, the pain had become more regular, more pronounced while eating, drinking, and talking, and more intense at night and after waking up. Conservative therapy with Carbamazepine was initiated but proved ineffective. After a long search for the cause and visits to several doctors magnetic resonance imaging (MRI) and angiography (MRA) were done to clarify the diagnosis. Based on MRI, there was no evidence of pathology in the major intracranial arteries. MRI confirmed a neurovascular conflict between the right trigeminal cistern, petrous vein, and superior cerebellar artery with root deformity. A developmental variant with a smaller right vertebral artery was also been identified. The patient underwent right-sided posterior fossa craniotomy and nervus trigeminus microvascular decompression surgery using a Teflon pad. After the applied treatment, the patient's condition improved and the pain was not observed.

Summary. A 25-year-old male presenting with right trigeminal neuralgia for 4 years. MRI of the brain verified a neurovascular conflict between the right trigeminal nerve with the upper cerebellar artery and petrosal vein. Microvascular decompression for Trigeminal neuralgia was performed.

Conclusions. TN is a common cause of chronic facial pain that affects the patient's quality of life. Although it's more common in older patients, we need to recognize symptoms and rule out underlying causes in younger adults, which can be treated surgically.