Giant intracavernous aneurysm presenting with isolated trigeminal neuralgia: a case report

ABSTRACT

Background: Trigeminal neuralgia (TN) commonly affects individuals aged more than 50 years and is mostly primary owing to trigeminal nerve neurovascular compression. We report a case of secondary TN attributed to a giant intracavernous aneurysm compressing the trigeminal nerve.

Case presentation: A 74-year-old female presented with classic TN symptoms, which were initially refractory to medical treatment. Imaging including MRI brain, MR angiography, and cerebral angiogram revealed a giant intracavernous aneurysm measuring $1.7~\rm cm \times 2.8~\rm cm$, inducing mass effect on the left Meckel's cave. Aneurysm embolization was challenging due to the difficult cannulation of the distal portion of the aneurysm. The patient opted for conservative management with mild improvement of symptoms.

Conclusions: Intracavernous aneurysm rarely present with isolated trigeminal neuralgia. This case report emphasizes that the assessment of the intracranial vasculature should be considered as part of the diagnostic imaging work-up for patients presenting with TN.

Keyword: Intracranial aneurysm; Trigeminal neuralgia; Embolization therapeutic; Elderly; Case report