

## TRIGEMINAL NERVE NEURALGIA ASSOCIATED WITH COMPRESSION BY THE BASILAR ARTERY: CASE REPORT

Ruy Abdalla Soares <sup>1</sup>  
Anna Carollina Barbosa Gomes <sup>2</sup>  
Geovana Machado Silva <sup>3</sup>  
Rafael Lugli Mantovani Perini <sup>4</sup>  
Mariana de Oliveira Caixeta <sup>5</sup>  
Leandro Moreira <sup>6</sup>  
Hígor Chagas Cardoso <sup>7</sup>

**INTRODUCTION:** Trigeminal neuralgia (TN) is a syndrome characterized by recurrent episodes of pain described as “throbbing”, which affects the branches of this nerve, mainly the maxillary and mandibular. It presents a typical clinic, which affects the patient’s basic activities, such as eating and talking, more commonly affecting the right side. With the insufficiency of clinical treatments, the surgical ones are indicated, such as percutaneous balloon compression (PBC), an agile technique performed under local anesthesia. **OBJECTIVE:** To report the case of a patient who developed an atypical form of TN, caused by nerve compression by the basilar artery. **CASE DESCRIPTION:** This case is about a 52-years-old male patient diagnosed with TN caused by dolichoectasia of basilar artery and tortuous displacement of its course to the left, maintaining contact with the cisternal portion of the left trigeminal nerve. This presentation is unusual because, in TN caused by vascular compression, in most cases this trigeminal nerve is compressed by the superior cerebellar artery. TN, before being diagnosed, tends to be confused with toothache, which leads to the extraction of several teeth in the search for the cessation of pain. This happened to the patient, without improvement. The PBC treatment was performed on the left trigeminal nucleus, resulting in analgesia, which allowed the patient to return to his work activities as a truck driver. As an expected complication, he presented ipsilateral hypoesthesia, with progressive improvement since the date of the procedure. It was also decided to maintain clinical therapeutic treatment with carbamazepine 400 mg daily. **CONCLUSION:** This report describes a rare case that is little discussed in the literature, representing about 2,8% of the cases already diagnosed with this disease and with an important clinical picture, which may serve as an aid for further studies in similar cases. In conclusion, although TN occurs because of basilar artery ectasia in a minority of cases, PBC of this vessel, as it was performed properly and with good indication, was able to bring efficient results in pain relief and improvement of the patient’s quality of life. It should be noted that the benefits of treatment outweighed its harms, since the hypoesthesia observed, even if it was not progressively improving as in this case, would be much preferable to the extremely intense pain of TN, as reported by the patient himself. **Keywords:** trigeminal neuralgia; nerve crush; basilar artery; therapeutics.

<sup>1</sup> Medical student at Universidade Evangélica de Goiás - UniEVANGÉLICA, E-mail: ruysoares.med@gmail.com

<sup>2</sup> Medical student at Universidade Evangélica de Goiás - UniEVANGÉLICA, E-mail: anna.carollina36@hotmail.com

<sup>3</sup> Medical student at Universidade Evangélica de Goiás - UniEVANGÉLICA, E-mail: jokimachado123@gmail.com

<sup>4</sup> Medical student at Universidade Evangélica de Goiás - UniEVANGÉLICA, E-mail: rafaellugliperini@hotmail.com

<sup>5</sup> Medical student at Universidade Evangélica de Goiás - UniEVANGÉLICA, E-mail: marianacaixeta2002@gmail.com

<sup>6</sup> Neurosurgeon and pain interventionist, Unimed Hospital – São Carlos/SP, leandromoreiraneuro@gmail.com

<sup>7</sup> Professor of Medicine at Universidade Evangélica de Goiás - UniEVANGÉLICA, E-mail: medhigor@gmail.com