

*Abstracts of the Scientific Awards of XXXIX COMU 2020 - Research Classified - Panels Award - Case Report*

## **Artery Dissection as an Cause of Ischemic Stroke in Hebiatric Patient: a Case Report**

**Lucas Lourencio Borges, Iara Tosta, Giovana Figueiredo Maciel, Kaio Igor Tosta**

Universidade de Medicina UNIFIMES, Centro Universitário de Mineiros, Trindade, GO, BR

**Introduction:** The dissection of cervical artery is characterized by laceration in the intima layer that results in a reduction in the lumen of the affected artery causing obstruction of blood flow. This block, partially or totally, is responsible for only a small portion of stroke in adults. However, in patients under 40 years old dissection of the cervical artery is a very common cause of this type of stroke. For this reason, early recognition of this condition in young patients is essential for the adequate clinical intervention.

**Objective:** To report a case of ischemic stroke resulting from cervical artery dissection in a hebiatric patient.

**Case report:** FSM, male, 16 years old, arrived at the neurological center complaining of headache in the occipital region that started eight days ago. He also reported asthenia, photophobia and discrete dysarthria. The physical examination showed bilateral dysdiadocosinesia and positive Romberg. An computed tomography scan of the skull and an MRI were then requested, in which the white and gray substances in the cerebellar hemispheres were hypodensitive, suggestive of ischemic stroke. For the etiological diagnosis, an angioresonance of cervical vessels was performed, which showed dissection of the cervical artery. After diagnostic confirmation, the patient was treated with antithrombotic and anticoagulant, progressing satisfactorily. The incidence of isquemic stroke resulting from dissection of the cervical arteries is a rare condition, affecting about 2.5 / 100,000 people per year. The dissection result in stroke in only 2% of all cases. However, analyzing only cases among young patients the dissection results in stroke in 22.5%. Presentation of multiple intraxial lesions with T2 hypersignal associated with asymmetry of the vertebral arteries with a small narrowed segment are highly suggestive if not specific for ischemic stroke. The early diagnosis of this clinical condition is extremely important for the patient's satisfactory evolution, since metabolic changes resulting from ischemia result in a decrease in the production of ATP in the infarcted region, which impairs, temporarily or permanently, the main functions of this region. The dissection of cervical arteries, due to its low incidence, is a disorder still under diagnosed. Its late identification results in an increase in the incidence of PICs, especially in young patients. The early recognition of this pathology is essential for an early and effective treatment that reduces the possibility of permanent neurological injuries that would decrease the quality of life of these patients.

**Keywords:** Stroke; Brain ischemia; Young adults.