

Images in clinical medicine



Post-traumatic pseudoaneurysm of the external carotid artery

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Received: 09 Jun 2020 - **Accepted:** 24 Jul 2020 - **Published:** 18 Mar 2021

Keywords: Pseudo aneurysm, external carotid artery, cerebral CT

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Cite this article: Abdel Ilah Drissi Maniani et al. Post-traumatic pseudoaneurysm of the external carotid artery. PAMJ Clinical Medicine. 2021;5(68). 10.11604/pamj-cm.2021.5.68.24184

Available online at: <https://www.clinical-medicine.panafrican-med-journal.com//content/article/5/68/full>

Post-traumatic pseudoaneurysm of the external carotid artery

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Image in medicine

Our case is about a 24-year-old male who consults in an emergency for a left cervical swelling with a history of a penetrating cervical trauma occurred 15 days before. Computed tomography (CT) was performed who shows a hypo dense left cervical collection well limited surmounted by a spontaneously hyper-dense hematoma (A, B), with intense enhancement on post contrast at arterial time with individualization of communication with a branch of the external carotid artery (C,D) characteristic of the pseudo aneurysm (PA). The PA or false aneurysm is defined by a rupture of the continuity of the arterial wall with creation of an aneurysmal sac thanks to a pseudo-wall formed by the adjacent structures while maintaining

continuity with the nourishing artery, PA carotid arteries are often post-traumatic sometimes other cause are involved (vasculitis, local infection, iatrogenic). The interval between trauma and symptoms is very variable, it results in a pulsating and pulsating cervical swelling on palpation with an audible noise on auscultation. Ultrasound shows a cystic mass with a turbulence in the blood flow making the yin-yang sign on Doppler examination and to-and-fro waveforms on the pulsed Doppler examination. Computed Tomography generally

targets a hypo-dense collection with an intense vascular type enhancement in arterial time and a smooth wall which communicates with a nourishing artery. Magnetic resonance imaging (MRI) allows more characterization (morphology, size of collar, study of collaterality). Conventional angiography is an invasive examination which generally presents a therapeutic interest (stenting, embolization) while the surgical indication is reserved for specific cases.

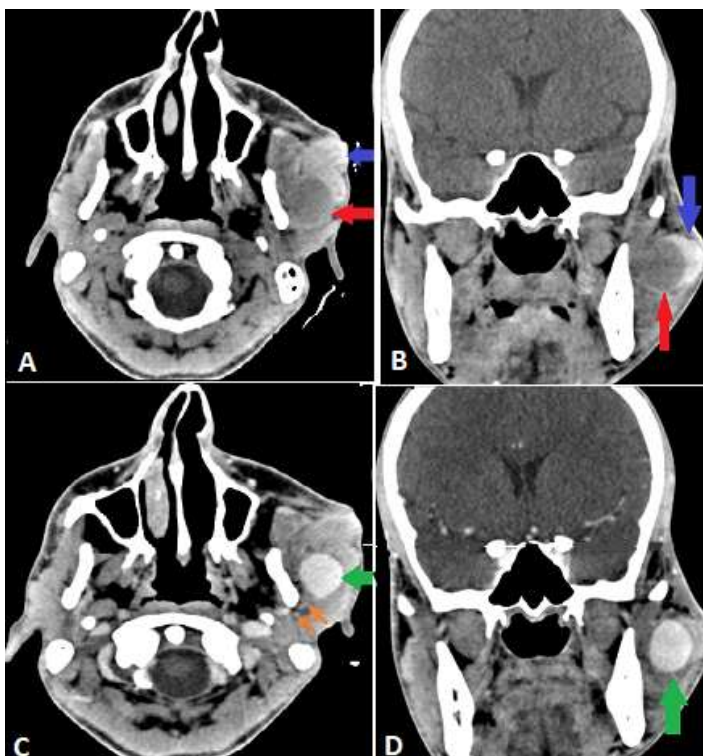


Figure 1: cerebral CT in axial (A), coronal (B) non-contrast section and axial (C) coronal (D) post-contrast section showing a hypo-dense left cervical collection well limited (red arrows) surmounted by a spontaneously hyper-dense hematoma (blue arrows) with intense enhancement on post-contrast at arterial time (green arrows) with individualization of communication with a branch of the external carotid artery (orange arrows)