

IMAGENS EM REUMATOLOGIA

#### NO PULSE: A MEDICAL CONUNDRUM

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Takayasu's arteritis (TA) is a chronic inflammatory disease that affects large vessels, predominantly the aorta and main branches, leading to vessel wall thickening, fibrosis, stenosis, aneurysms and thrombus formation<sup>1</sup>.

TA presents a biphasic course: firstly, an inflammatory phase; and a later one, where vascular occlusion mainly occurs<sup>2</sup>.

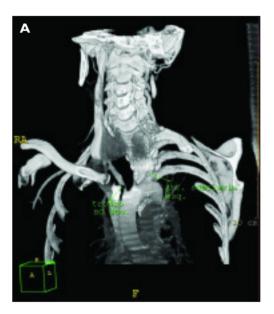
Diagnosis of TA is always challenging as the clinical presentation varies, biopsy of large-vessel lesions (gold standard) is rarely performed and because there are no serological or imaging specific diagnostic tests.

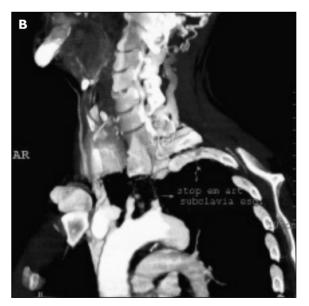
The treatment differs according to the phase of the disease. In the inflammatory phase the treatment is mainly immunosuppressive; however, in the latter, vaso-occlusive phase, surgical treatment is needed.

The authors describe the case of a 40 year-old caucasian woman referred to our Autoimmune Clinics due to a nine months duration of dizziness with episodic syncope, occipital headache, right cervicodinia and recurrent amaurosis fugax. Bilateral calf and right upper limb claudication, Raynaud's phenomenon, polyarthralgia, diffuse alopecia, oral ulcers, anorexia and weight loss of fifteen kilograms in two years were also reported. Her past history included: heavy smoking habits (28 packyear); lumbar vertebral fracture surgery; G5P5A2 (2 first trimester spontaneous abortions) and intake of oral contraceptives. Physical examination was remarkable for a good general health status, but with anisosphygmia (BP RA: 60/30 mmHg; BP LA: 100/60 mmHg), asymmetry in arterial pulses (especially on the right) and bilateral carotid bruit (stronger on the left side).

Some diagnostic tests were performed: a) Lab workup (CBC, ESR, CRP, coagulation times, biochemistry profile, immunological profile, urinaly-

sis), EKG, chest X-ray, head CT and ophtalmological exam were normal. b) nailfold capillaroscopy re-

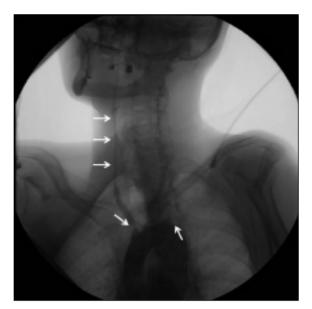




**Figure 1a and 1b.** Cervico-Thoracic revealing a complete occlusion of the left subclavian artery and a marked stenosis of the right brachiocephalic trunk

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**Figure 2.** Supra-aortic Angiography confirming a complete occlusion of the left subclavian artery and a marked stenosis of the right brachiocephalic trunk

vealed a secondary Raynaud's phenomenon; c) echocardiogram showed mitral regurgitation; c) 24h-Ambulatory Blood Pressure measurement documented a hypotensive profile; d) Arterial cervical doppler ultrasound revealed low peak systolic velocity and pulsability, marked high diastolic velocity in the brachiocephalic trunk, in bilateral carotideal axes and the left subclavian artery; e) Cervico-thoracic angio-CT (Figures 1a and 1b) complemented by cervico-thoracic-abdominal angiography (Figures 2 and 3) revealed occlusion of the left subclavian artery, concentric stenosis of brachiocephalic trunk and mild stenosis of carotid axis and primitive right iliac artery.

A strong suspicion diagnosis of TA<sup>3</sup> in the occlusive stage was established. A multidisciplinary treatment was adopted: smoking cessation, double antiplatelet therapy, statins, trimetazidine and endovascular surgery (stenting and brachiocephalic trunk and right primitive iliac angioplasty); immunosuppressive treatment was deferred due to surgical approach.

However, three months later, she complained of dysphonia, cough, upper dyspnea and bilateral cervical enlargement consistent with firm, painful polyadenopathy. An infiltrative and vegetant supraglotic mass was identified and consistent with a moderately differentiated squamous cell carcinoma of the larynx (T3N3M0). She was sub-



Figure 3. Lower limb Angiography revealing a stenosis of the right primitive iliac artery

mitted to total laringectomy, followed by radiotherapy. Presently, she is in oncological remission.

This case is particularly challenging because of the two concomitant diagnoses: TA and larynx neoplasia. TA was presumed due to clinico-radiological presentation, as vascular biopsy was not possible. The association to malignancy (Meig's Syndrome, Leukemias and oropharynx carcinoma)<sup>4-7</sup> has been reported in literature, though still unclear.

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