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VASCULITIS OF THE LOWER LIMBS AN UNUSUAL MANIFESTATION IN A PATIENT INFECTED BY HIV: ABOUT A CASE

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ABSTRACT
Vasculitides are inflammatory diseases that compromise the blood vessel wall, causing a narrowing of its lumen, manifested by ischemia and eventual necrosis of the tissue or organ it supplies. Patients positive for the human immunodeficiency virus (HIV) can develop vasculitis, either mediated by immunological factors or by direct vascular injury. In the following case, we report a patient who develops manifestations suggestive of vasculitis of the lower limbs without identifiable risk factors. other than HIV. It is a very rare entity, which is why doctors must keep in mind that in HIV-positive patients, regardless of their viral load, this pathology can occur.

CASE REPORT
This is a 35-year-old male patient, with a homosexual orientation, who consulted for a clinical picture of approximately 14 hours of evolution consisting of pain at rest in both lower extremities of insidious onset, with increasing intensity up to 10/10 on a analogous to pain, accompanied by paresthesias, sensation of coldness and weakness, with inability to move, without other accompanying symptoms.

In the systems review, she reported breast growth and occasional neck pain. When questioning his history, he refers to chronic asymptomatic HIV infection in stage A1, receiving antiretroviral therapy with good adherence; In addition, he refers to self-medicating hormonal treatment since he was 16 years old in order to change his secondary sexual characteristics, currently and for 3 months taking Mesigyna (norethisterone enanthate-estradiol valerate) daily; on the other hand, he reports immunization against SARS COV 2, receiving the last dose 20 days ago. On physical examination, vital signs TA: 120/70 HR: 87 RF: 19 T: 37° within normal limits, without alterations in facial or cranial features, grade 4 gynecomastia, rhythmic heart sounds without envelopes and well-ventilated lungs without excesses, there was no abdominal pain and no masses or megalia were palpated, in both lower extremities the popliteal pulses were diminished, the rest of the distal pulses were bilaterally absent, coldness in the distal third of the legs, capillary refilling at 4 seconds, ccompanied by bilateral pallor and marble coloration of the dorsum of the left foot (see image 1);

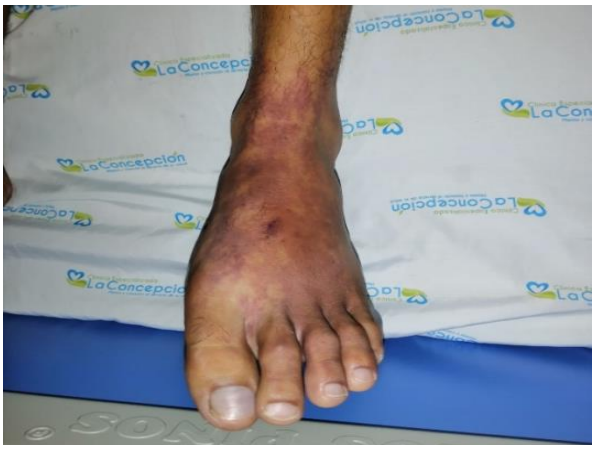

Fig. 1: Purple lesion on the left foot.

the upper extremities were normal. Neurological examination was normal, except for paresthesia, dysesthesia, and allodynia in both lower limbs. With paraclinical report: complete blood count showing leukocytosis 22,950 cells/mm3 at the expense of neutrophils 94.8%, lymphocytes 1.89%, hemoglobin

14.4G/dL, platelets 207 cells/mm3, altered liver function GPT 157 U/L, GOT 413 U/L, total bilirubin: 2.0mg/dL at the expense of the indirect 1.4mg/dL, normal coagulation times, ionogram within normal parameters, preserved renal function, EKG with sinus rhythm, normal chest X-ray.

An emergency arterial Doppler ultrasound was performed that showed progressive vasoconstriction from the superficial femoral with monophasic flows and decreased velocities, which is accentuated towards the distal (vasoconstriction and monophasic flows) in the posterior tibial, anterior tibial, pedal, retromalleolar and digital arteries without flow. with bilateral symmetric involvement, ruling out associated atheromatous or thrombotic lesions. This finding was confirmed with arteriography that concluded severe thinning from the femoral, superficial and deep to bilateral distal with out the presence of clots or angiographically evidente stenosing lesions. (See images 2, 2,1, 2.2)

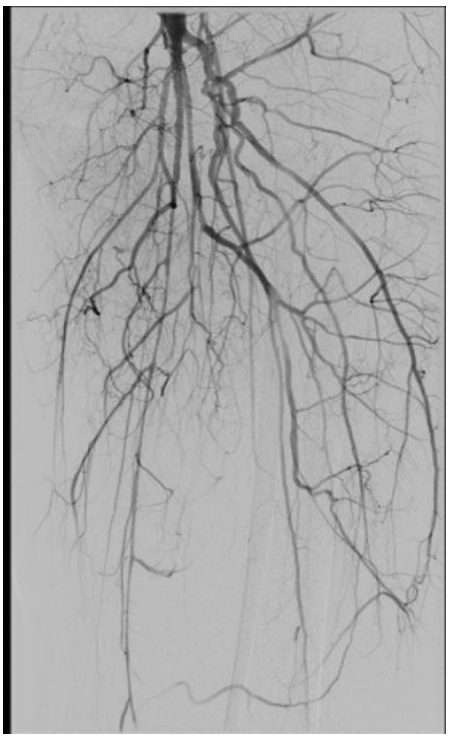

Image 2. Arteriography of the lower limbs.

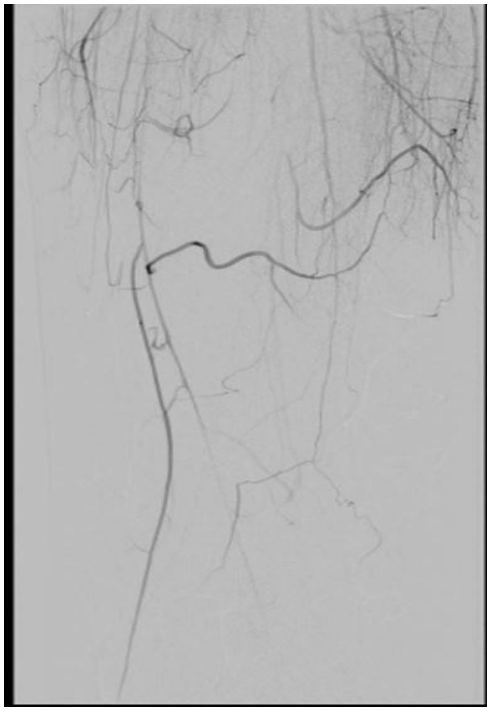

Image 2.1 Arteriography of the lower limbs.

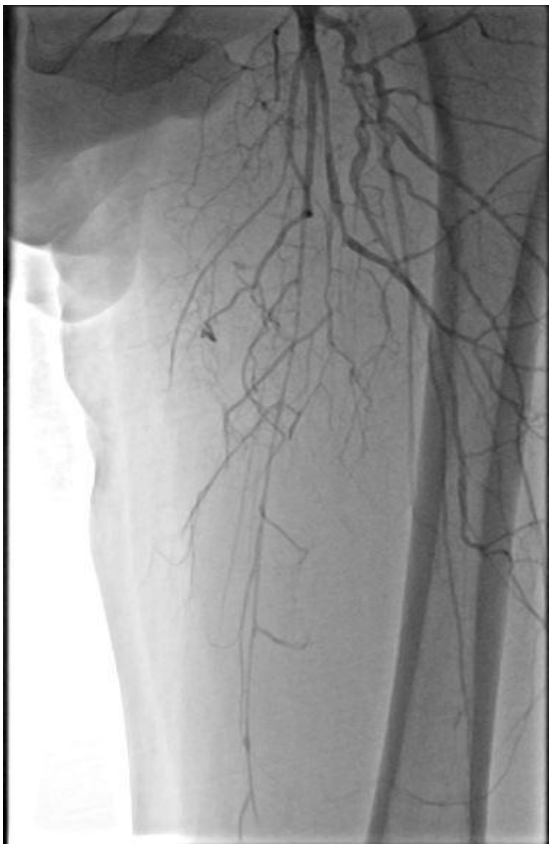

Image 2.2 Arteriography of the lower limbs.

For which management was started with vasodilators including prostaglandin E1, phosphodiesterase 5 inhibitors and calcium antagonists, in addition to antithrombotic therapy without initial improvement. As part of her evolution, she presented progressive serum CPK elevation up to 14,000, which was managed with

increased fluid intake without signs of acute kidney injury. Vasculitis was considered highly likely and an immunological and serological profile was requested; with a result of CD4 536 and viral load for HIV undetectable; Within the extension studies for venereal diseases, serology was performed for hepatitis B and C, Epstein Barr virus, herpes simplex virus, cytomegalovirus with negative results, in addition to antineutrophil cytoplasmic antibodies, Anti-DNA antibodies, Non-reactive antinuclear antibodies; C4 and C3 with result 28.1 and 111.3 respectively.

Therefore, management was performed with methylprednisolone 1 g IV for 3 days, with progressive improvement of symptoms, until adequate tissue perfusion, with angiographic control that showed resolution of vasospasm and adequate distal arterial flow.

DISCUSSION

This case describes the appearance of a case of vasculitis in the lower extremities of a patient with chronic asymptomatic stage A1 HIV infection, receiving antiretroviral therapy with good adherence, with immunological and serological profile results: CD 536 and undetectable viral load, serology for hepatitis B and C, Epstein Barr Virus, Herpes simplex virus, cytomegalovirus; negative. The notable feature of this case is the occurrence of the events described in the context of asymptomatic stage A1 HIV infection.

Vasculitis is characterized by an injury to the blood vessels that induces the reduction of vascular lumens and tissue ischemia. There is great heterogeneity in clinical presentation and its pathogenesis is not fully understood1. In the reported patient, the signs indicating poor peripheral perfusion were not related to the patient's neurological status and cardiac output, which suggested to the medical group that he was facing a probable case of vasculitis, a diagnosis that was later confirmed with imaging studies.

Likewise, a fact that draws the attention of this case is that in the literature the estimated prevalence of HIV-associated vasculitis is 1%, which is why it is considered an extremely rare condition2 3. HIV-associated vasculitis can be caused by a direct vascular injury or be mediated by immunological factors and mainly occurs in severe cases of immunosuppression CD4 below 200 cells/mL in the context of opportunistic infections4 5. However, in our case the patient had a CD4 count of 536 cells/mL which indicating that it can also occur in patients with optimal counts.

In addition, in some cases in the literature, data on co-infection between HIV and Epstein-BAR virus and HSV type 1 have been found, as was the case reported by Ana Manuel, Tania Victorio and company published in 2015 in the Brazilian journal of infectious diseases the case of a patient with HIV with a CD4 count of 460 cells/mL in addition to co-infection with these opportunistic viruses. On the other hand, it should be noted that in this case the patient did not present signs of inflammation in the paraclinical tests, which slightly delayed his diagnosis.

However, it should be noted that in some cases there may be an atypical presentation of the clinical picture that can lead to confusion or error when making a diagnosis, as reflected in a study by Borg and Dasgupta that reported normal inflammatory markers in 30% of cases. patients with vasculitis that were later revealed by imaging techniques6. Imaging findings can guide the diagnosis: on ultrasound, hypoechoic areas along the arterial wall also described as a string of pearls; in angiography, increased thickness of the vascular wall and reduced opacity of the vascular lumen, however, the gold standard is the histopathological study7 8, which in our case could not be performed.

To conclude, it will always be important that these types of cases are socialized, reported and published in the literature so that we have more and more information about this very unusual pathology, in order to identify the different clinical forms of presentation, options evidence-based therapeutics in each case.

Interest conflict.

The authors declare not to have any interest conflicts.

ethical approval

Ethical approval and informed consent were obtained from the patient for the publication of the case.

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