ARTERITIC ANTERIOR ISCHEMIC OPTIC NEUROPATHY (AION) AS A MANIFESTATION OF RHEUMATOID VASCULITIS: CASE REPORT

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BACKGROUND

The typical patient with rheumatoid vasculitis (RV) has long-standing rheumatoid arthritis (RA), a high level of anti-CCP and/or rheumatoid factor (RF), erosive joint disease, and often presents with rheumatoid nodules. Peripheral neuropathy, either a multiple mononeuritis or a symmetrical polyneuropathy, occurs in approximately 40% of patients with RV. Anterior ischemic optic neuropathy (AION), despite more common in giant cell arteritis (GCA), can also occur in RV and lead to a very high risk of amaurosis.

CASE REPORT

Patient E.B.V., 41 years old, was being followed at the specialized rheumatology outpatient clinic, due to a diagnosis of RA (RF and anti-CCP in high titers). After a period of follow-up and disease control with methotrexate, the patient is off follow-up for 4 years, attending again in 2021 with symptoms marked by paresthesias and allodynia in lower limbs. At first, the affected regions were only the legs, but as the days went by, other regions with the same symptoms were added to the initially affected area. Also, concomitant to the pain, there was a description of reduced visual acuity and already left amaurosis. Finally, the physical examination revealed several joints with synovitis, especially in the hands. Upon admission, the patient was evaluated by the ophthalmology team, and submitted to a fundus examination, which showed the presence of a pale and edematous optic disc, suggestive of AION. In the magnetic resonance imaging with vessel wall study of the temporal artery, it was possible to verify signs suggestive of thickening (a sign of an inflammatory process). Finally, the evaluation of the peripheral neuropathy using electroneuromyography was compatible with multiple mononeuritis. Thus, we concluded that both the AION and the multiple mononeuritis were secondary to RV and we decided to start therapy with methylprednisolone and cyclophosphamide. Complete response of the neurological manifestation and no relapses of AION (despite no improvement of the baseline visual acuity) were seen until now.

Figure 1. Retinography of the left eye showed a pale optic disc, suggestive of atrophy of the anterior region of the optic nerve, in the peripapillary region, suggestive of retinal ischemia, and diffuse arteriolar thinning.

Figure 2. Fluorescein angiography showing diffuse hypofluorescence due to filling failure, suggestive of hypoperfusion in the choroidal circulation. Arteriolar filamentation in the peripapillary region, with altered flow ("box-carrying"), suggestive of retinal ischemia.

Figure 3. A study of the vessel wall of the left temporal artery showing thickening, edema, and parietal enhancement after injection of paramagnetic contrast agent.

CONCLUSION

Although rare, RV can manifest with involvement of the temporal arteries and their branches. In this case, the presence of other manifestations (Multiple Mononeuritis and synovitis) and the absence of elements of GCA allowed us to attribute the AOIN to RV.

KEYWORDS

Rheumatoid vasculitis, AION, Case report.