A RARE DISORDER TRIGGERED POST-COVID-19: COGAN SYNDROME

Ana Beatriz Abreu Soares de Pina¹, Cristyan César Dall'Agnol¹, Flavio Barboza^{1,*}

1.Universidade Federal do Mato Grosso, Sinop (MT), Brazil.

*Corresponding author: flavio.fbarboza@uol.com.br

BACKGROUND

Cogan syndrome (CS) is a rare autoimmune pathology, affecting the auditory and visual system. It is characterized by recurrent interstitial keratitis, associated with rapidly evolving sensorineural hearing loss and vestibular system dysfunction. It can be classified as typical or atypical, when there is vasculitic involvement of large (aortitis), medium or even small vessels. Even though interstitial keratitis is the classic ocular finding, it is not essential for diagnosis, anterior uveitis, conjunctivitis, retinal vasculitis, or panuveitis may be present. Fever, fatigue, weight loss and arthritis may be associated. Diagnosis is based on the presence of ocular disease associated with vestibular system's dysfunction.

CASE REPORT

A 66-year-old man, 2 months after being admitted to hospital with COVID-19 to receive supplemental oxygen, started with weight loss (13 kg), rapidly progressive bilateral deafness, photophobia and bilateral loss of visual acuity associated with difficulty in walking due to intense vertigo. Sequentially, he began to experience pain and joint swelling, diffuse erythematous-violaceous skin lesions throughout the body. The ophthalmologic evaluation showed bilateral panuveitis. Audiometry compatible with sensorineural deafness. On physical examination, a decrease in auditory and visual acuity, ocular hyperemia, diffuse skin lesions (Figure 1), gait disorder by vertigo and symmetrical polyarthritis of large and small joints. After excluded infections, additional tests: ANCA, ANA, rheumatoid factor, protein electrophoresis, cryoglobulinemias and blood count, liver and kidney function normal. Erythrocyte sedimentation rate 92 mm and C-reactive protein 92 mg/dL. Cerebrospinal fluid analysis and brain's magnetic resonance assessment without alterations. Cutaneous biopsy (perivascular lymphocytic infiltrate in the superficial and deep dermis with lymphocytes, histiocytes and neutrophils, multifocal granulomatous reaction, areas of leukocytoclasia with collagenolysis in the dermis). The ocular involvement, vestibular system and skin biopsy corroborated with the diagnosis of CS with vasculitic manifestations. High doses of methylprednisolone were instituted with faster clinical improvement. After recurrence of the condition with corticosteroid regression, azathioprine was chosen for maintenance.

Figure 1. Erythematous-violaceous skin lesions.

CONCLUSION

Several infectious triggers have been described in the development of CS, in this case there was a recent time line with COVID-19. An atypical CS diagnosis was made (recurrence of symptoms with steroid withdraw). So far, there are no reports of post-COVID-19 SC.

KEYWORDS

Vasculitis, COVID-19, Cogan syndrome.