

Case report

Recurrent Pericarditis in a Patient with Ankylosing Spondylitis: Successful Treatment With anakinra. Case report

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Case Report

Female patient, 37 years old, in rheumatological regular follow-up since 2017, being referred by a cardiologist after presenting episodes of recurrent pericarditis.

During the investigation of the condition in September of 2017 she was diagnosed with ankylosing spondylitis (low back pain inflammatory, morning stiffness, bilateral sacroiliitis, enthesitis and HLA B27 positive).

Infectious and metabolic causes of pericarditis have been ruled out as well as other immune diseases.

The treatment was started with non-hormonal anti-inflammatory drugs, and modifying drugs of the synthetic disease (methotrexate and sulfasalazine) and evolved with improved axial symptoms but persisted with repeated episodes of pericarditis (totaling about 23 episodes), including cardiac tamponade and hospitalization in an intensive care unit. During the acute episodes, the patient was treated with corticosteroids, anti-inflammatories and colchicine with good response, but did not tolerate weaning from corticosteroid therapy.

In an attempt to control the cardiac condition, she used various medications (methotrexate, azatoprine, mycophenolate of mofetil, intravenous human immunoglobulin and canakimumab) without therapeutic response despite immunopotentialized treatment.

As an additional attempt to improve the autoimmune process, surgery was performed for removal of breast prostheses in 2019 (suspected adjuvant-induced autoimmune syndrome- ASIA) however,

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the patient presented new episodes of pericarditis.

Evolved with dependence on oral corticosteroids despite numerous attempts to reduce dose and weaning and presented various complications due to chronic corticotherapy: osteoporosis with recurring fractures, infections and lesions, obesity, mood and sleep disorders. Given the severity of the condition and refractory to all treatments the drug anakinra 100 mg a day was started after judicial authorization in view of the non-availability of the drug in Brazil.

After 1 year of use, the patient evolved with an improvement in the condition, allowing a reduction in corticosteroid therapy and remission of symptoms.

Discussion

Recurrent pericarditis is a challenging condition to manage, with limited treatment options and significant morbidity. Anakinra, a recombinant interleukin-1 (IL-1) receptor antagonist, has emerged as a potential therapeutic option for recurrent pericarditis and should be considered in patients with refractory disease or who are intolerant to other treatment options.

Despite the inclusion of the drug in several guidelines in the field of cardiology for the treatment of recurrent pericarditis, several countries still do not have this drug, which can lead to numerous complications, as in the case described.

In rheumatic diseases, the use of Anakinra has been studied and indicated in some diseases such as rheumatoid arthritis (RA), systemic juvenile idiopathic arthritis (sJIA), and adult-onset Still's disease (AOSD). In ankylosing spondylitis, despite some initial studies, the

drug is not yet approved for controlling the underlying disease.

In this case report, we describe a rare association of ankylosing spondylitis and recurrent pericarditis refractory to numerous immunosuppressive drugs and steroid dependence with excellent results with Anakinra. This drug may be a promising alternative for complex cases of associated immune-mediated diseases and its use should be extended to underdeveloped and developing countries.

Further studies are needed to assess the optimal dosing and duration of treatment, as well as the long-term outcomes and cost-effectiveness of anakinra compared to other treatments.

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