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Reply to the comment of Sartorelli et al. "Diagnostic approach and novel therapeutic option for cardiac inflammatory disorders"

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We have read with interest the comments from Sartorelli et al. [1] regarding our recent report of a patient with antisynthetase syndrome (aSS) complicated of myocarditis and pleuropericarditis [2]. In their correspondence, the authors highlighted two important points. First, the absence of endomyocardial biopsy (EBM) for myocarditis diagnosis was notified. We fully agree with the authors that EBM is the gold standard for myocarditis diagnosis, notably for the aetiology [3]. However, in our report, the patient did not have only cardiac symptoms. She also had polyarthritis, seritis and anti-Jo1 antibody. In this situation, myocarditis was clinically suspected due to the presence of dyspnea and elevated serum T-troponin as recommended [3]. As suggested by those guidelines, in presence of clinically suspected myocarditis, cardiovascular imaging resonance imaging (MRI) was performed prior to EBM. As MRI was highly suggestive of myocarditis and the clinical presentation was highly suggestive of aSS, we made the choice to not perform EBM. Moreover, despite that EBM is the gold standard for myocarditis diagnosis, some studies suggest that the sensitivity is not high [4]. In their comments, the authors also discuss the use of anakinra, an IL-1 blocking agent. The authors emphasized the role of IL-1 in idiopathic inflammatory myopathies (IIM), pericarditis and myocardial diseases. We fully agree with the authors that anakinra or others IL-1 blocking agents might represent a therapeutic option in IIM notably when cardiac involvement is present. It was suggested that IL-1 could play a role in the pathophysiology of IIM [5,6]. In IIM, IL-1α and β are expressed in capillaries and sarcolemma of muscles and IL-1 levels are correlated with severity of the disease. Blocking IL-1 appeared to decrease the activity of IIM in some studies [7,8]. Regarding pericarditis, anti-IL-1 agents represented a therapeutic option when conventional treatment such colchicine or NSAIDs are not sufficient [9]. Finally, some studies suggested IL-1 could play a role in myocardial disease such as autoinflammatory, vascular or autoimmune myocarditis [10]. All this data suggested that targeting IL-1 is a relevant therapeutic option for pericarditis but also myocarditis in our patient. Nonetheless, randomized studies are mandatory to demonstrate this efficacy.

Disclosure of interest

The authors declare that they have no competing interest.

References

[1] Sartorelli S, Campochiaro C, De Luca G. Diagnostic approach and novel therapeutic option for cardiac inflammatory disorders. Joint Bone Spine 2019, http://dx.doi.org/10.1016/j.jbspin.2019.01.021.
[2] Meudec L, Jelin G, Forien M, et al. Antisynthetase syndrome and cardiac involvement: a rare association. Joint Bone Spine 2018, http://dx.doi.org/10.1016/j.jbspin.2018.09.019.
[3] Caforio AL, Pankuweit S, Arbustini E, et al. Current state of knowledge on aetiology, diagnosis, management, and therapy of myocarditis: a position statement of the European society of cardiology working group on myocardial and pericardial diseases. Eur Heart J 2013;34:2636–48.
[4] Friedrich MG, Sechtem U, Schulz-Menger J, et al. Cardiovascular magnetic resonance in myocarditis: a JACC white paper. J Am Coll Cardiol 2009;53:1475–87.
[5] Englund P, Nennesmo I, Klareskog L, et al. Interleukin-1alpha expression in capillaries and major histocompatibility complex class I expression in type II muscle fibers from polymyositis and dermatomyositis patients: important pathogenic features independent of inflammatory cell clusters in muscle tissue. Arthritis Rheum 2002;46:1044–55.
[6] Grundtman C, Salomonsson S, Dorph C, et al. Immunolocalization of interleukin-1 receptors in the sarcolemma and nuclei of skeletal muscle in patients with idiopathic inflammatory myopathies. Arthritis Rheum 2007;56:674–87.
[7] Furlan A, Botsios C, Ruffatti A, et al. Antisynthetase syndrome with refractory polyarthritis and fever successfully treated with the IL-1 receptor antagonist, anakinra: A case report. Joint Bone Spine 2008;75:366–7.
[8] Zong M, Dorph C, Dastmalchi M, et al. Anakinra treatment in patients with refractory inflammatory myopathies and possible predictive response biomarkers: a mechanistic study with 12 months follow-up. Ann Rheum Dis 2014;73:913–20.
[9] Jain S, Thongprayoon C, Espinosa RE, et al. Effectiveness and safety of Anakinra for management of refractory pericarditis. Am J Cardiol 2015;116:1277–9.
[10] De Luca G, Cavalli G, Campochiaro C, et al. Myocarditis: an Interleukin-1-mediated disease? Front Immunol 2018;9:1335.

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