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Diagnostic approach and novel therapeutic option for cardiac inflammatory disorders. Comment on "Anti-synthetase syndrome and cardiac involvement: a rare association" by Meudec et al. Joint Bone Spine 2018. doi: 10.1016/j.jbspin.2018.09.019

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In their article, Meudec et al. elegantly described the case of a patient affected by anti-synthetase syndrome complicated by myopericarditis. The diagnosis of myopericarditis was supported by serum T-troponin elevation and myocardial oedema with diffuse gadolinium enhancement disclosed at cardiac magnetic resonance [1]. The patient was treated initially with an association of high-dose prednisone, rituximab and methotrexate with initial good response. Interestingly though, the patient experienced a relapsing pericarditis, successfully treated with a 7-day course of anakinra [1].

The case described is extremely interesting and a few points caught our attention. Firstly, endomyocardial biopsy (EMB), the gold standard for myocarditis diagnosis [2], was not performed in this case. The authors based their diagnosis only on biochemical and imaging investigations. It is known though that EMB histology and especially immunohistochemistry are considered mandatory to correctly establish the etiology (viral versus virus-negative myocarditis) and to set pattern and stage of the myocardial inflammation [2]. Secondly, although the initial treatment with prednisone, rituximab and methotrexate (the latter recently described as a valuable option in patients affected by myocarditis [3]), anakinra treatment was started for relapsing pericarditis. The emerging role of anti-IL1 receptor therapy in patients affected by virus-negative myocarditis and pericarditis has been recently demonstrated in several case reports and a randomized clinical trial [4]. Furthermore, in the last few years, encouraging reports of cardiac inflammatory diseases successfully treated with anakinra have been recorded [5–8]. It has indeed been speculated that different etiologic pathways of myocardial inflammation could converge in a common immune-mediated pathogenic process, in which interleukin-1 plays a central role [9]. Therefore, in this subset of patients, anakinra seems a promising and effective strategy since, as well as being safe and well tolerated, it has demonstrated its efficacy with a rapid onset in the management of cardiac involvement in different settings, both in exclusive cardiac disease and in systemic autoimmune or inflammatory disorders. In this scenario, anakinra could represent a therapeutic option not only for pericarditis, but also for myocarditis, even if clinical trials are needed to widely and robustly demonstrate this promising preliminary evidence, especially as possible first-line therapy.

Disclosure of interest

The authors declare that they have no competing interest.

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