Effusive-constrictive pericarditis as a complication of long-term treatment with adalimumab

- Mira Stipcevic^{1,2*},
- Drazen Zekanovic1,
- Jogen Patrk¹,
- Igor Rudez³,
- ©Zoran Bakotic^{1,2},
- Marin Bistirlic¹,
- ©Zorislav Susak¹.
- ®Branimir Buksa¹,
- Stipe Kosor¹,
- ©Karla Savic¹,
- ©Kresimir Librenjak¹

¹Zadar General Hospital, Zadar, Croatia

²University of Osijek, Faculty of Dental Medicine and Health, Osijek, Croatia,

³Dubrava University Hospital, Zagreb, Croatia **KEYWORDS:** constrictive pericarditis, adalimumab, pericardiectomy.

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*ADDRESS FOR CORRESPONDENCE: Mira Stipcevic, Opća bolnica Zadar, Ulica Bože Peričevića 5, HR-23000 Zadar, Croatia. / Phone: +385-98-593-416 / E-mail: mira.stipcevic@gmail.com

ORCID: Mira Stipcevic, https://orcid.org/0000-0003-4351-1102 • Drazen Zekanovic, https://orcid.org/0000-0002-8147-6574

Jogen Patrk, https://orcid.org/0000-0002-8165-692X • Igor Rudez, https://orcid.org/0000-0002-7735-6721

Zoran Bakotic, https://orcid.org/0000-0002-7095-0111 • Marin Bistirlic, https://orcid.org/0000-0002-9213-4174

Zorislav Susak, https://orcid.org/0000-0002-2417-2494 • Branimir Buksa, https://orcid.org/0000-0001-5206-512X

Stipe Kosor, https://orcid.org/0000-0002-2813-9026 • Karla Savic, https://orcid.org/0000-0002-1339-8922

Kresimir Librenjak, https://orcid.org/0000-0002-4168-6120

Introduction: Inhibitors of tumor necrosis factor-a are frequently encountered in modern clinical practice for treatment of psoriatic arthritis and opportunistic infections are in that context a common concern. Infective pericarditis has been described as a complication of these treatments. In most cases patients present with acute pericarditis, caused by wide spectrum bacteria, and can lead to cardiac tamponade and acute heart failure. Some patients present with symptoms of pericardial constriction.

Case report: We present a case of sixty-year-old patient who was treated for psoriatic arthritis for fifteen years, and due to recurrent polychondritis adalimumab was introduced in therapy two years ago. The patient had good response to treatment, without side effects. In January 2021 he presented with

symptoms of fatigue, swollen abdomen, difficulty breathing, swelling of legs and weakness. Symptoms started two months earlier. There were no signs of acute infectious illness. Echocardiography revealed thickened pericardium and moderate circumferential pericardial effusion, with respirophasic interventricular septal motion. Computed tomography showed thickened and calcified pericardium (Figure 1). Finally, heart catheterization confirmed the reciprocal respiratory pressure changes in the right and left ventricle (Figure 2). The patient's symptoms of constrictive heart failure persisted and led to surgical treatment consisting of radical pericardiectomy and decortication (Figure 3 A, B). No pathogen was identified in pericardial fluid and pathohistological examination of pericardium showed chronic inflammation. The patient recovered completely and was without symptoms ten months later.

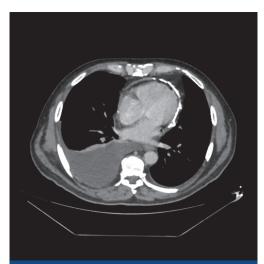


FIGURE 1. Computed tomography showing thickened and calcified pericardium.

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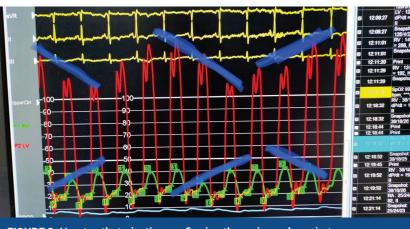
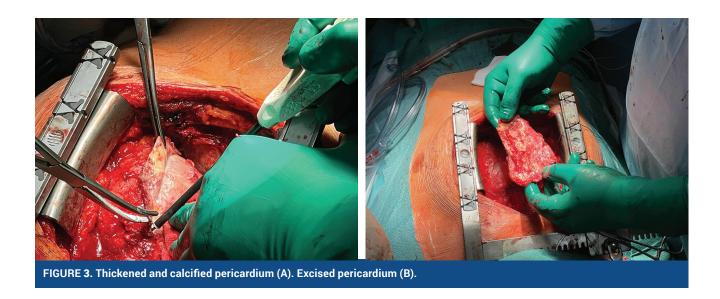


FIGURE 2. Heart catheterization confirming the reciprocal respiratory pressure changes in the right and left ventricle.



Conclusion: Prolonged treatment with adalimumab can pave the way to opportunistic infections which can cause acute pericarditis. In some cases, it can lead to chronic inflammation with late onset of chronic pericarditis. In case of constrictive pericarditis with severe and persistent hemodynamic impairment which cannot be controlled by medical therapy surgical pericardiectomy should be considered.

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