Perimyocarditis — uncommon extraintestinal manifestation of ulcerative colitis

Zapalenie osierdzia i mięśnia sercowego — niecodzienna pozajelitowa manifestacja wrzodziejącego zapalenia jelita grubego

Agnieszka Olszanecka¹, Martyna Schönborn², Agnieszka Trynkiewicz², Małgorzata Cebeńko², Agnieszka Piątek-Guziewicz³, Tomasz Mach³, Danuta Czarnecka¹

¹I° Department of Cardiology, Interventional Electrocardiology and Hypertension, Jagiellonian University Medical College, Krakow, Polska
²Students' Scientific Group at the I° Department of Cardiology, Interventional Electrocardiology and Hypertension, Jagiellonian University Medical College, Krakow, Poland
³Department of Gastroenterology, Hepatology and Infectious Diseases, Jagiellonian University Medical College, Krakow, Poland

Abstract

Ulcerative colitis (UC) is an example of inflammatory bowel disease that can be manifested by extraintestinal complications including cardiac disorders. The most commonly reported — pericarditis — occurs in 0.23% of all UC patients. The knowledge about the etiology of pericarditis is important to implement accurate therapy. However, the diagnosis is not always clear and can be connected with diagnostic and therapeutic challenges. In this case, we present a perimyocarditis in the course of UC exacerbation.

Key words: ulcerative colitis, perimyocarditis, pericarditis

Introduction

In clinical practice pericarditis is the most common disorder of the pericardium. The aetiology of acute pericarditis include infectious and non-infectious causes. Pericarditis may be isolated disorder or may occur as a part of systemic disease [1]. Ulcerative colitis (UC) is an example of inflammatory bowel disease (IBD) that not only affects the gastrointestinal tract but also can be associated with extraintestinal complications. Cardiac disorders seem to be uncommon but potentially serious manifestations. They can range from mild inflammations to pericardial tamponade, cardiogenic shock and myocardial infarction [2, 3]. The most commonly reported — pericarditis — occurs in 0.23% of all UC patients [4]. Nevertheless, the diagnosis is not always clear and can be related with diagnostic and therapeutic challenges. Therefore, we present a case of perimyocarditis in the course of UC which caused some diagnostic problems.

Case report

A 21-year-old woman with newly diagnosed ulcerative colitis, treated with small dose of sulfasalazine, was admitted urgently to the hospital complaining of fever, weakness, chest pain and bloody diarrhoea (< 4 bloody stools/day). Blood analysis revealed anaemia (hemoglobin [Hb] 7.8 g/dL), hypokalemia (3.2 mmol/L), slightly elevated troponin
Figure 1. Electrocardiogram showing ST elevations and PR depressions

Cardiac manifestations of UC may occur before, simultaneously or after the diagnosis of underlying disease. It should be emphasized that extraintestinal manifestations of IBD not always parallel the activity of the underlying disease. Temporal relationship between onset of UC flares and the course of cardiovascular manifestation may be difficult to define and can cause a significant challenge to physicians managing these patients. A multidisciplinary team approach is often needed for effective management.

In the process of differential diagnosis UC related pericarditis the drug-induced aetiology has to be taken into account. However, in this case, the patient’s condition did not improve with oral prednisolone. Therefore, further diagnostic procedures were initiated. Cardiac magnetic resonance imaging (MRI) was performed to assess the degree of myocardial involvement. Due to negative blood cultures and probable autoimmune aetiology of pericarditis, successful treatment with prednisolone 50 mg per day was started. In a couple of days alleviation of fever and chest pain was observed. Markers of inflammation and NT-proBNP level were normalizing. Control echocardiography showed reduction of pleural and pericardial effusion and improvement of left ventricular contractility of the heart (Figure 2C, D). The patient was discharged in a good condition, free of symptoms. Prednisolone was prescribed orally with the recommendation of dose reduction. On the basis of overall clinical picture, echo and MRI results, myocarditis and pericarditis was confirmed, most likely caused by the main disease.
account (toxic effects of — mesalazine and azathioprine). In the literature, cases of mesalazine-induced pericarditis have been reported [3, 5, 6]. One study recommend that among patients treated with mesalazine who present symptoms of perimyocarditis, mesalazine should be immediately discontinued [3]. In our case, perimyocarditis occurred early after diagnosis of the UC, however severity of intestinal symptoms was disproportional to the systemic involvement. Implementation of steroid therapy was problematic owing to highly increased inflammatory markers and possibility of sepsis. It has been reported that the intensive-care unit admissions of UC patients in 22% resulted from septic complications [7]. Finally, patient was treated successfully with mesalazine and prednisolone.

The knowledge about the aetiology of pericarditis is important to implement accurate therapy [8].

**Conclusions**

Myocarditis is rarely taken into account as one of the possible extraintestinal manifestations of UC. Any patient with UC who develops symptoms of pericarditis require prompt diagnosis and accurate therapy with glucocorticosteroids and consideration of mesalazine cessation.

**Conflict of interest(s)**

None declared.

**Streszczenie**

Wrzodziejące zapalenie jelita grubego (UC) jest przykładem nieswoistej choroby zapalnej jelit, która może się manif estoować objawami pozajelitowymi, w tym objawami ze strony układu sercowo-naczyniowego. Najczęściej stwierdzane zapalenie osierdzia występuje u 0,23% pacjentów z UC. Wiedza na temat etiologii zapalenia osierdzia jest niezbędna do wdrożenia właściwej terapii. Mimo to diagnoza nie zawsze jest łatwa i może być związana z wyzwani mi zarówno w zakresie diagnostyki jak i leczenia. Przedstawiony opis przypadku ilustruje problem zapalenia osierdzia i mięśnia sercowego w przebiegu UC.

Słowa kluczowe: wrzodziejące zapalenie jelita grubego, zapalenie osierdzia i mięśnia sercowego

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References


