Online publication ahead of print, AJMHS Vol 65, 2024

# Calcific Constrictive Pericarditis – An Uncommon Conundrum

Vitorino Modesto dos Santos [1*], Lister Arruda Modesto dos Santos [2]

[1] Internal Medicine, Armed Forces Hospital, Catholic University of Brasília-DF, Brazil
[2] Advanced General Surgery and Oncosurgery of IAMSPE, São Paulo-SP, Brazil

**Abstract**

Pericardial calcification has diverse etiologies, and is commonly incidentally evidenced in imaging studies of the thorax. Dumani et al described in this Journal two patients with calcific constrictive pericarditis (CP): a 45-year-old woman and a 60-year-old man successfully treated by pericardiectomy and with unremarkable postoperative courses. The patients presented with the classical signs and symptoms associated with the diastolic heart insufficiency resultant of the usual progressive mechanical restriction by the CP. The authors emphasized the invasive surgical procedures for those patients with no significant improvement of the clinical manifestations after conservative management. The aim of this letter is to highlight the merit of the authors with some additional novel literature data.

**Keywords**: Calcification; Constrictive pericarditis; Diagnosis; Treatment

**Address for correspondence:** Vitorino Modesto dos Santos *, Armed Forces Hospital. Estrada do Contorno do Bosque s/n, Cruzeiro Novo. CEP 70658-900, Brasília-DF, Brazil. Email: vitorinomodesto@gmail.com

Pericardial calcifications may develop due to diverse causes and are often incidentally detected during chest imaging studies, and can occur in up to 98% of pericarditis (1-5). Dumani *et al* (3), recently reported in this Journal two cases of calcific constrictive pericarditis (CP) in a 45-year-old woman and a 60-year-old man successfully managed by pericardiectomy via median sternotomy and with unremarkable postoperative courses. The patients presented with the classical signs and symptoms associated with the diastolic heart insufficiency resultant of the usual progressive mechanical restriction by the CP (3). The authors cited viruses, tuberculosis, chest radiation, and heart surgery among common etiologies of CP, and emphasized the invasive surgical procedure for those patients with no significant improvement of clinical manifestations after conservative management (3). Their article merit to be highlighted by some additional novel literature data on the CP.

A 63-year-old woman with dyspnea during four years utilizing adalimumab to control hidradenitis suppurativa had chest images of CP, and the final diagnosis was constrictive pericarditis (1). Pericardial calcifications predominated on the left ventricle walls and appeared circumferential at the cardiac apex; as the specific diagnostic tests for tuberculosis and rheumatologic diseases resulted negative, the initial option was for a conservative management, but a pericardiectomy was needed due to cardiac failure (1). The post-operative period developed with remarkable improvement of her symptoms; although uncommon, the authors highlighted the possible occurrence of adalimumab cardiac complications, including the pericardial effusions, pleuritis, and pericarditis (1). A 48-year-old man with Sjögren's syndrome had pleural effusion and ascites and utilized corticosteroid treatment, and two-years later had dyspnea and abdominal distension; chest images showed pericardial thickening and effusion, attributed to rheumatic disease (2). Four years after the initial diagnosis, he presented dyspnea, orthopnea and ascites, and with the diagnosis of constrictive pericarditis he underwent a partial pericardiectomy (2). The authors stressed the Sjögren's syndrome as uncommon potential cause of constrictive pericarditis, mainly in young people without classical risk factors for this condition (2). A 60-year-old man had dyspnea for 3 weeks, edema of lower extremities and ascites; the chest images showed a “milk of calcium” hyperdense pericardial fluid; the ascitic fluid adenosine deaminase was normal, while the QuantiFERON-TB was mildly elevated (4). The diagnosis was constrictive pericarditis, and he had a pericardiectomy; tuberculosis was ruled out and, without a clear role, surgical samples showed *Cutibacterium acnes*. He underwent a course of ceftriaxone for 4 weeks, besides the empiric treatment for eventual latent tuberculosis, evolving with clinical improvement during the follow-up (4). A 44-year-old hypertensive man under hemodialysis for 11 years, presented dyspnea and lower limbs edema for 3 months, and

imaging studies revealed left pleural effusion and extensive cardiac calcifications consistent with diagnosis of constrictive pericarditis; he underwent total pericardiectomy and is asymptomatic for over one year after surgery (5). The authors commented on up to 12 % of dialysis pericarditis evolving to constrictive pericarditis due to uremia related toxins, calcium disturbances, hyperuricemia, and accentuated calcification that developed during the 11 years of the dialysis treatment (5).

**Acknowledgements:** None declared.

**Conflict of Interest Statement**: The author declares that have no conflict of interest.

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