Folia Cardiologica 2015
tom 10, nr 6, strony 448–449
DOI: 10.5603/FC.2015.0084

ISSN 2353–7752

Heart failure and pneumonia disguised left atrial tumour

Niewydolność serca i zapalenie płuc jako kliniczna maska guza lewego przedsionka

Łukasz Grydz[1], Jarosław Hiczkiewicz[1], Krzysztof Błaszyk[2], Katarzyna Łojewska[1], Maciej Pęksa[3]

[1]Department of Cardiology, Multidisciplinary District's Hospital, Nowa Sól, Poland
[2]Department of Cardiology, University of Medical Sciences, Poznań, Poland
[3]Department of Cardiac Surgery, Cardiac Surgery Hospital in Nowa Sól, Poland

Abstract

We present a case of heart failure and pneumonia which masked the tumour that filled the whole left atrium.

Key words: heart tumours, heart failure, echocardiography, pneumonia, *haemangioma*

(Folia Cardiologica 2015; 10, 6: 448–449)

A 65-year-old woman without prior history of cardiovascular disease was admitted to the department of cardiology from an outside hospital with a two month history of exertional dyspnoea, productive cough and hoarseness. On physical examination she was noted to have lower extremity oedema and bilateral crackles. Laboratory evaluation was notable for an elevation of white blood cell count. The patient was diagnosed with pneumonia and treated with antibiotics and diuretics. Subsequently, she showed some improvement in her clinical status. However, because of the clinical findings of heart failure, she was evaluated by a cardiologist who found her to be tachypneic and tachycardic. Cardiac auscultation revealed muffled cardiac sounds. An electrocardiogram demonstrated accelerated sinus tachycardia 110 bpm. Laboratory tests revealed elevated C-reactive protein (CRP), without leucocytosis, normal level of procalcitonin, moderately elevated N-terminal of the prohormone brain natriuretic peptide (NT-proBNP) and anaemia. Echocardiography showed a 64,7 × 33,9 mm mobile tumour attached to the septum that filled the entire left atrium with mitral valve orifice obstruction (Fig. 1). The patient underwent cardiac surgery the following day. Histopathological examination of the left atrial tumour revealed *haemangioma*.

Primary cardiac tumours are very rare. Most cardiac tumours are metastatic and are 30 times more common than primary tumours. Seventy-five percent of primary cardiac tumours are benign and only 5% of all benign tumours are haemangiomas. Fewer than hundred cases are reported in the literature. Most cardiac haemangiomas are located in the ventricles and 30% are associated with extracardiac haemangiomas. Tumours commonly result in unspecific symptoms and clinical findings typical for cardiac and systemic diseases. Depending on localization they can produce a variety of clinical masks.

Left atrial tumours often result in symptoms similar to mitral stenosis or pulmonary hypertension. Tumours in the right atrium usually typically give symptoms of tricuspid stenosis. Patients with tumours in the right ventricle present right-sided heart failure while left ventricular tumours cause interference with electrophysiological conduction, produce arrhythmias, syncope or atypical chest pain due to coronary artery obstruction by tumour involvement or emboli.

In our case the first diagnosis was pneumonia and heart failure, which masked the tumour that filled the whole left atrium. Symptoms were similar to that in mitral stenosis. There were exertional dyspnoea, cough with sputum and

Address for correspondence: lek. Łukasz Grydz, Oddział Kardiologii, Wielospecjalistyczny Szpital, Samodzielny Publiczny Zakład Opieki Zdrowotnej, Nowa Sól, ul. Chałubińskiego 7, 67–100 Nowa Sól, tel. 68 388 21 00, e-mail: lgrydz@gmail.com

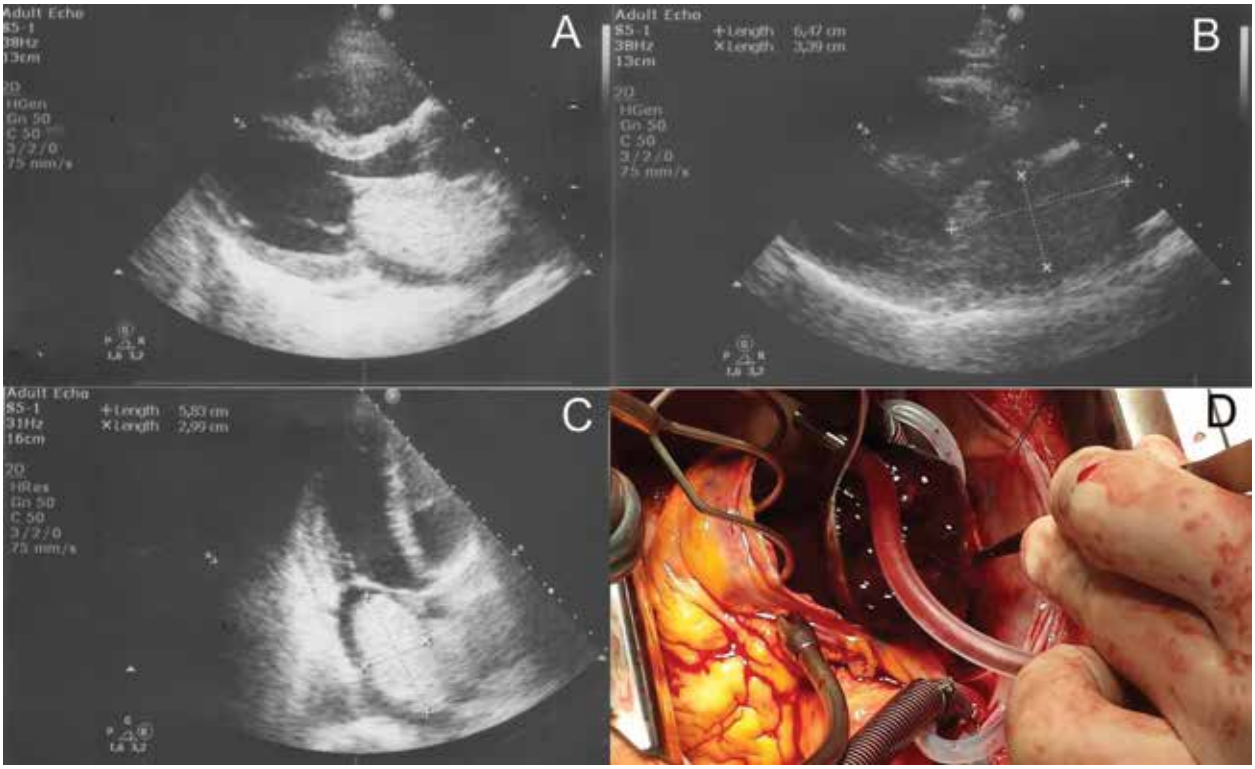

Figure 1A. Parasternal long axis echocardiographic view demonstrated tumour mass in left atrium; **B, C.** Apical four chamber echocardiographic view of tumour; **D.** Tumour during cardiac surgery

hoarseness. Despite the huge size of the tumour, the patient showed no clinical signs of arrhythmias, emboli and pulmonary oedema. Symptomatic haemangiomas are indications for cardiac surgery.

In patient treated ineffectively from pneumonia presenting with nonspecific signs and symptoms of cardiovascular disease echocardiography may be helpful in earlier diagnosis.

Conflict interest(s)

None declared.

Streszczenie

Autorzy prezentują przypadek niewydolności serca i zapalenia płuc, które maskowały rzadki guz wypełniający cały lewy przedsionek.

Słowa kluczowe: guz serca, echokardiografia, niewydolność serca, zapalenie płuc, *hemangioma*

(Folia Cardiologica 2015; 10, 6: 448–449)