A 69-year-old male patient was admitted for two syncopal episodes on effort associated with dyspnoea and jugular constraining. Clinically, he was found to have mild bilateral pleural effusion, jugular vein distension, and marked peripheral oedema. Echocardiographic examination showed a leftward interventricular septum during peak inspiration owing to the increasing right ventricle pressure (Figure 1A) and a dilation (27 mm) and absent collapse of the inferior vena cava and hepatic veins (Figure 1B). Ventriculography does not reveal calcifications of the pericardium (Figure 1C). At the invasive haemodynamic evaluation, simultaneous right and left catheterization showed the square root sign of LV diastolic pressure trackings and equalization of LV and RV diastolic plateau pressure tracking. Magnetic resonance images (coronal T1-weighted FSE sequence image; Harmony, Siemens, Erlangen, Germany) showed the thickened pericardium (>5 mm) with irregular margins (white arrows) (Figure 1D).

After administration of contrast media, the late acquisitions revealed diffuse and homogeneous hyperintense pericardium (white arrows) (Figure 1E and F; a, left ventricle; b, right ventricle). An endomyocardial biopsy was performed and excluded associated restrictive myocardial diseases. A diagnosis of constrictive pericarditis was put forward and the patient underwent pericardiectomy. Surgical pathology examination of the resected pericardium revealed, at gross examination, a diffuse severe fibrous thickening (Figure 2A). At histology, multiple foci of chronic inflammation (lymphocytes and plasma cells) are detected associated only with mild calcification (Figure 2B, haematoxylin-eosin ×40; and Figure 2C, B-lymphocytes CD20; Figure 2D, T-lymphocytes CD3; Figure 2E, macrophages CD68; Figure 2F, plasma cells CD79a; Figure 2G, cytotoxic T-lymphocytes CD8, all magnification ×160).

Initially, the constrictive pericarditis was concealed because of the coexistence of equivocal clinical symptoms. Because of sleeping troubles, a diagnosis of mild restrictive pulmonary disease together with obstructive sleep apnoea syndrome was put forward. An electroencephalogram was performed suggesting focal epilepsy and valproic acid therapy was undertaken. The patient was discharged home 7 days after surgery. Nowadays, he is able to practice a light mountain-bike activity.