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Images in Congenital Heart Disease

Symptomatic left atrial aneurysm in a neonate

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A TERM BABY WEIGHING 2.8 KG WAS resuscitated with mechanical ventilation, diuretics and albumin after Caesarean delivery with signs of asphyxiation. Antenatal echocardiography one week earlier had shown hydramnios and foetal oedema. The chest radiograph showed an enlarged, globular heart (Fig. 1).

On the tenth day of life, the baby suddenly deteriorated, with signs of respiratory failure and acidosis. Echocardiography now demonstrated a large pericardial effusion and dilation of the left atrial appendage, which measured 24 mm × 9 mm, compared with left atrial dimensions of 13 mm × 12 mm (Fig. 2). On colour Doppler, there was turbulence in the narrow communication between the atrium and the appendage, consistent with obstruction. The thin-walled appendage bulged into an intact pericardial sack, which was tensely distended with fluid. The remainder of the heart was structurally normal.

Urgent operation was performed through a midline sternotomy. With release of about 100 ml of clear, yellow fluid, there was immediate improvement in the haemodynamic situation. The aneurysmal left atrial appendage, which now measured 30 mm × 15 mm, was resected at its neck without cardiopulmonary bypass, and the left atrium was closed in two layers with continuous 7/0 monofilament suture. The infant made an uncomplicated recovery after two days of mechanical ventilation for bilateral pneumonia.

Congenital aneurysms of the left atrium or its appendage, in the absence of an associated defect in the pericardium, cause earlier and more severe symptoms than those which can herniate into the pleural space.[1] Indications for surgical intervention are supraventricular arrhythmias, congestive heart failure, or systemic embolization. The cardiac tamponade in this patient, who is among the youngest to undergo surgery for

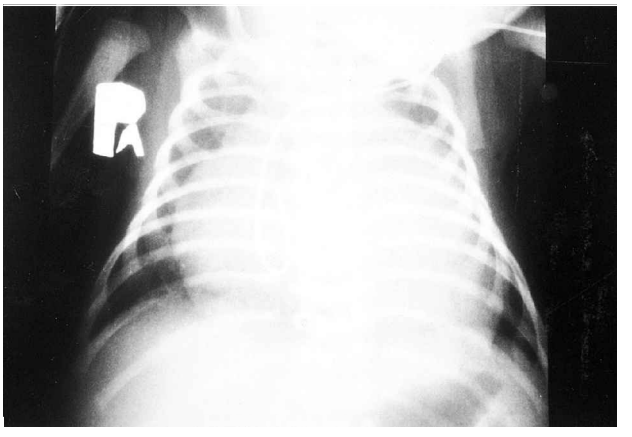

Figure 1.

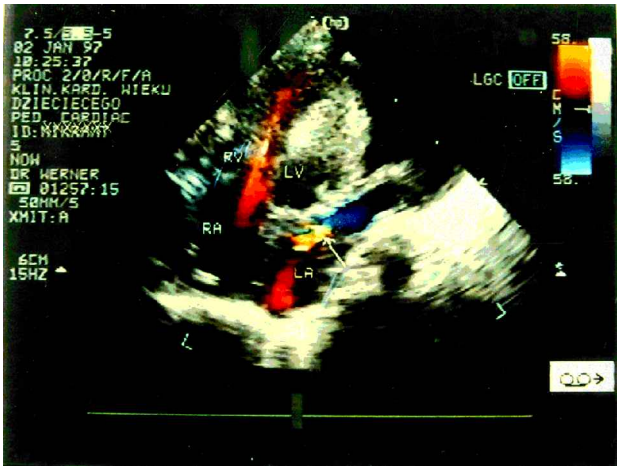

Figure 2.

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resection of an aneurysm of the left atrial appendage, probably resulted from rapid enlargement of the aneurysm. In retrospect, it seems likely that his symptoms during fetal life, and this diagnosis should be considered as a rare but possible cause of heart failure in the newborn.

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Reference

1. Camerini F, Galluzzi W, Grego M, Klugmann S, Scagoni A. Congenital aneurysm of the left atrium. Case report and analysis of the literature. Eur J Cardiol 1975; 3: 65–69.