

## A 4 MONTH OLD PATIENT PRESENTING WITH CLINICALLY DETERIORATING BRONCHIOLITIS. SHOULD WE THINK ABOUT SOMETHING ELSE?

Cassanello<sup>1</sup> P, Paris N<sup>2</sup>, Perez A<sup>2</sup>, Sabate<sup>3</sup> A, Castells L<sup>4</sup>, Castillo C<sup>4</sup>

1. Pediatric's Resident. Hospital Universitari General de Catalunya, 2. Pediatric Cardiology. Hospital Universitari General de Catalunya, 3. Pediatric Cardiology. Hospital Universitari Vall D'Hebron, 4. Neonatology Unit. Hospital Universitari General de Catalunya



### Case Report:

A 4-month-old male infant, admitted to the P-ICU with a RSV+ bronchiolitis. Upon admission, he requires NIV BIPAP with initial major clinical improvement being therefore transferred to the Ward. After 7 days upon admission he presents clinical deterioration with hypotension, skin pallor, difficulty of breathing, inspiratory and expiratory wheezing and hepatomegaly.

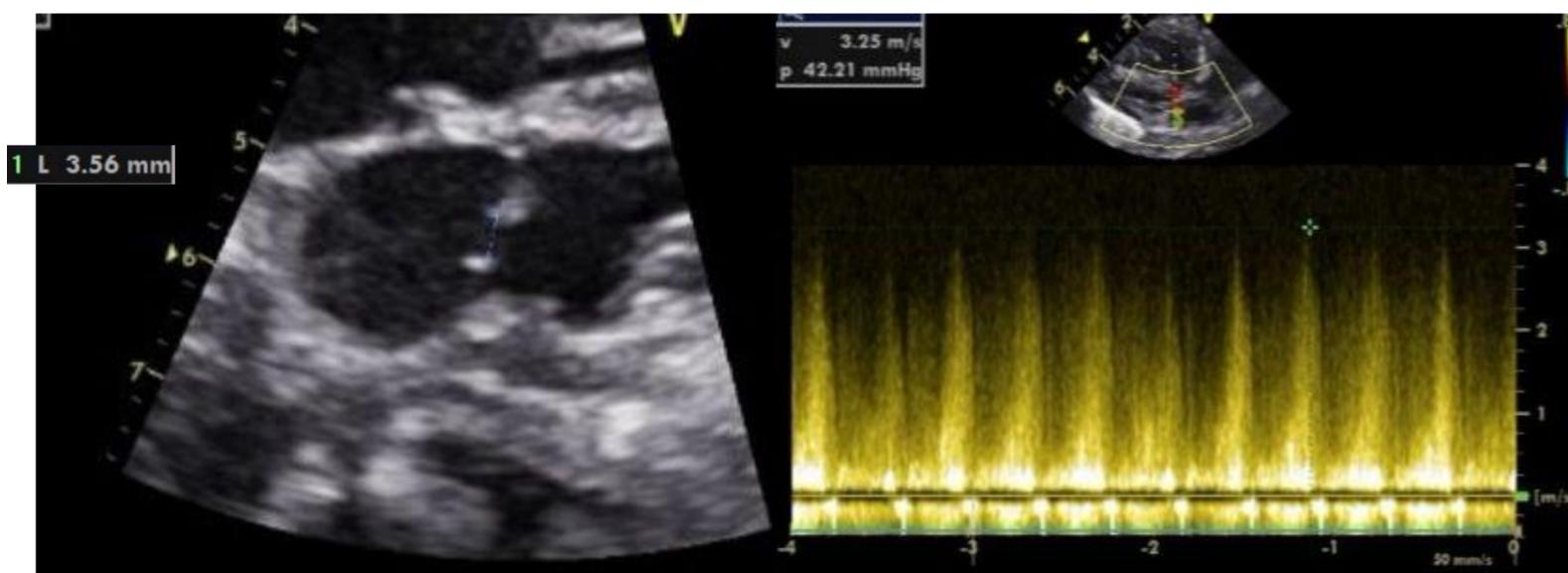
Echocardiogram performed shows:

Partially collapsed not hypertrophic left ventricle (FE Teich 74%)

Dilated right ventricle with slightly depressed systolic function

Severe tricuspid insufficiency with a 105mmHg gradient suggesting severe pulmonary hypertension.

Due to severe pulmonary hypertension with cardiogenic shock, the patient requires intensive pulmonary vasodilator treatment and ECMO. A follow-up echocardiogram shows the left atrium divided by an accessory membrane with the diagnosis of Cor Triatriatum Sinister (CTS). The patient underwent a surgical resection of the intraatrial membrane with favorable evolution.



### DISCUSSION:

Cor triatriatum sinister (CTS) is a rare pathology (0.4% congenital heart disease) and 80% of the cases associated with other heart diseases. The embryonic base of the CTS hasn't been well established. The mostly accepted hypothesis is inadequate implantation of the pulmonary veins on the left atrium which therefore creates a fibromuscular intraatrial accessory membrane.

Clinically, depending on the degree of partition of the left atrium and the size of the orifice, patients may remain asymptomatic.

If the intra-atrial foramen is small, the obstruction may create a pressure gradient that mimics semiology of mitral stenosis.

CTS has been associated with atrial arrhythmias that facilitate cardiac decompensation.

In symptomatic patients with high pressure gradient, treatment of choice is surgical resection



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