

Prenatal diagnosis of pulmonary arteriovenous malformation at third trimester with favorable postnatal outcome.

Velázquez-Rivera, JR., Apolonio-Martínez, A., Calleja-Pérez, AL., García-Navarro, JA., Vizueth-Olguín, I.

Introduction

Pulmonary arteriovenous malformations (PAVM) are caused by abnormal communications between pulmonary arteries and veins or the left atrium resulting in a right-to-left shunt. Rarely, can cause high-output heart failure during the early fetal period. Reported mortality is high, and cases described in the fetal period are extremely rare.

Case

We present the case of a 45-year-old woman in the third trimester pregnancy with a suspected pulmonary sequestration based on ultrasound findings of a left pulmonary mass. On color Doppler, the mass showed a vascular pattern draining into the left pulmonary vein, suggestive of PAVM.

Follow-up

Prenatal care was performed on an outpatient basis with ultrasound follow-up.

A male newborn was delivered at term and referred to cardiology where diagnosis was confirmed by angiography.

Discussion

PAVM results from incomplete development of the vascular septa between capillaries. In symptomatic patients or in the presence of large fistulas (2-3 mm), endovascular embolization is the treatment of choice. If embolization fails, surgery should be performed.

Conclusion

All previously reported cases were interrupted due to a "fatal prognosis" at birth. In contrast our patient, had a favorable and progressive outcome thanks to prenatal diagnosis, which allowed timely referral and postnatal management.



Figure 1. Fetal heart with an anechoic left pulmonary mass.

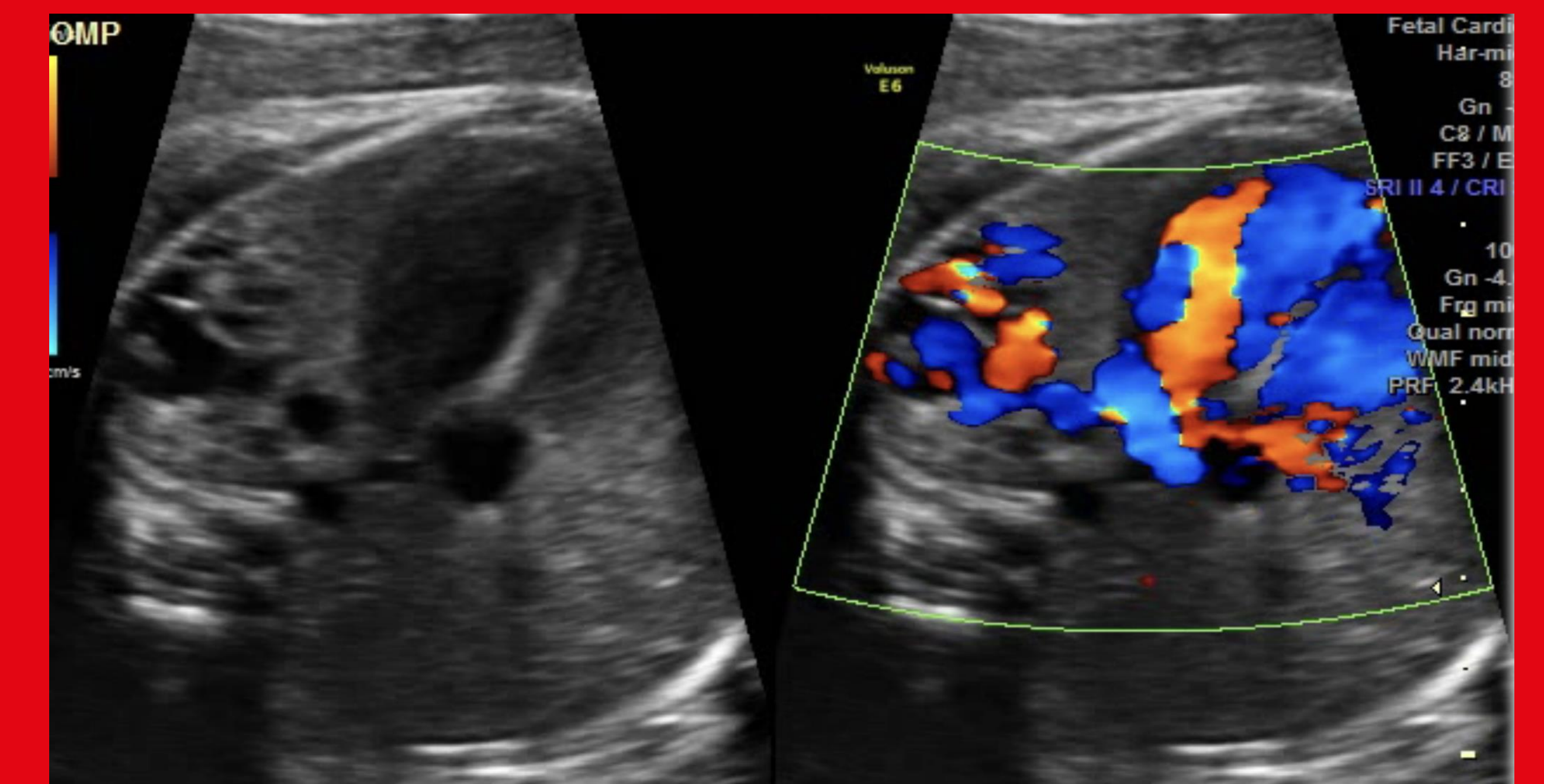


Figure 2. Color doppler of the pulmonary mass suggestive of PAVM.

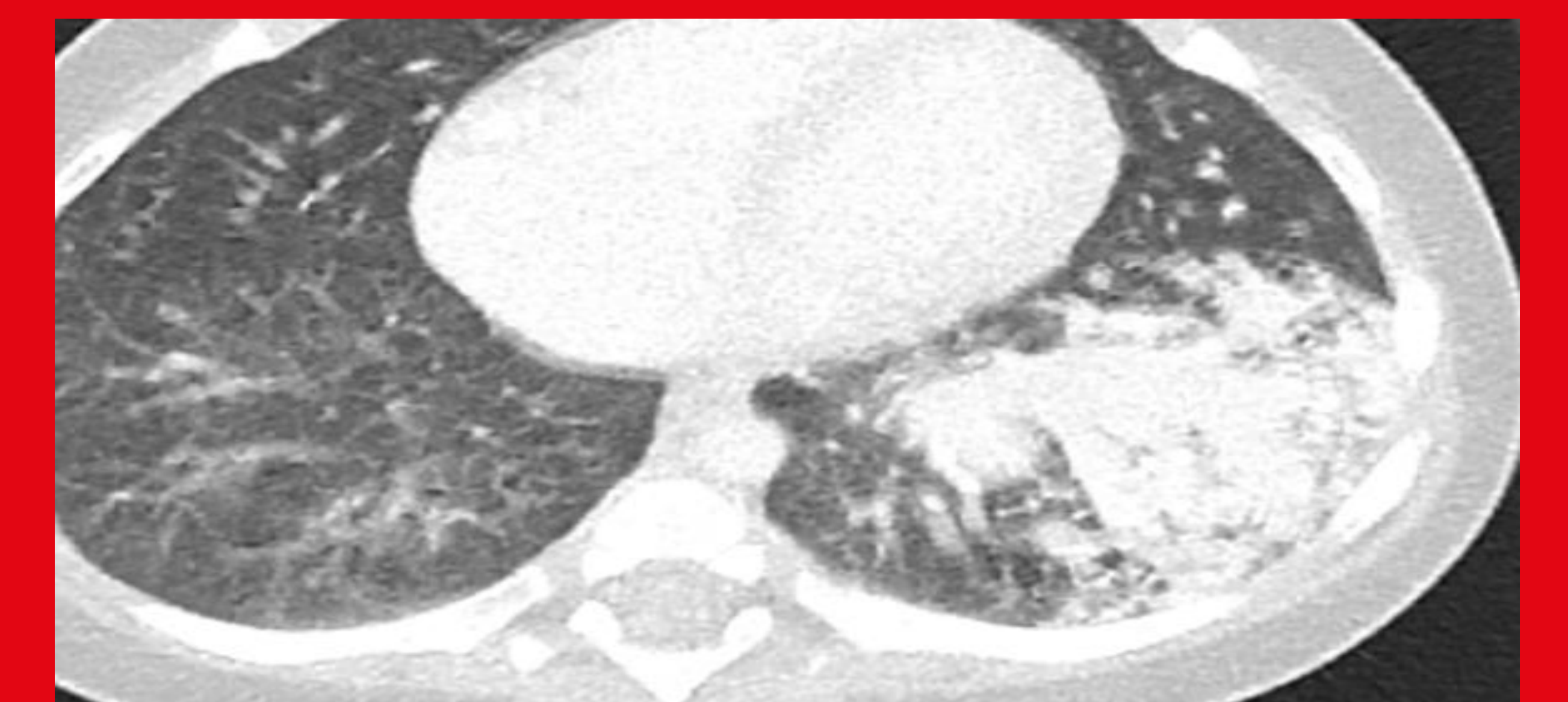


Figure 3. Pulmonary angiography confirming the diagnosis of PAVM.