



## Introduction

- Congenital intra-abdominal arteriovenous fistula is a rare pathology.
- Prenatal diagnosis is usually performed secondary to nonimmune hydrops.
- The use of **colour Doppler** is indispensable, which demonstrate the existence of a large anomalous arterial vessel connecting the umbilical vein to the aorta artery, with the presence of **pulsed Doppler with a high velocity flow**.

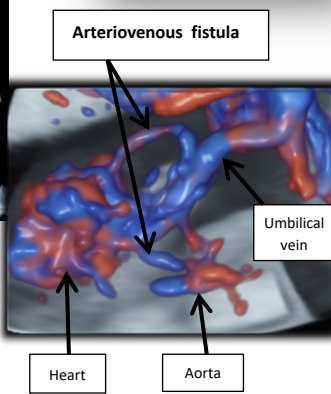
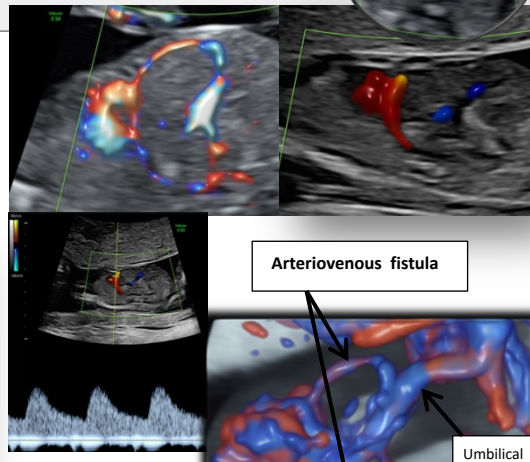
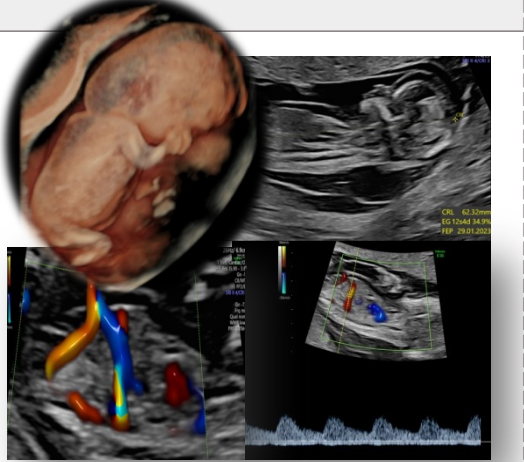
*We report two cases of arteriovenous communication between the intra-abdominal portion of the umbilical vein and the descending aorta in two fetuses with trisomy 21.*

## Case 1

- 12+5 weeks 32y G1**  
Referred for first trimester screening
- Large nuchal translucency (7.8 mm), generalized hydrops, reverse ductus venosus and an aberrant right subclavian artery were observed → High risk of 21 trisomy.
  - **Large vessel with arterial pattern connecting the descending aorta with the umbilical vein.**
  - Conotruncal heart disease was suspected.

## Case 2

- 15 weeks 31y G2P1**  
Referred by fetal DNA test with high risk for T21
- No hydropic fetus
  - **Large suprahepatic vessel running through the diaphragm connecting the thoracic descending aorta with the umbilical vein.**
  - Right aortic arch and tricuspid regurgitation.



↓  
**INVASIVE TECHNIQUE**

Both cases were **diagnosed of trisomy 21** and the patients decided **legal termination of pregnancy**.



## Conclusion

The increased use of colour Doppler could lead to an increase in the diagnosis of intra-abdominal A-V fistula and could even clarify the real association between intra-abdominal A-V fistula and chromosomal alterations such as trisomy 21.