

Persistent right umbilical vein: prenatal diagnosis and neonatal outcome.

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Objective: to evaluate the incidence and outcome of fetuses with prenatal diagnosis of persistent right umbilical vein (PRUV)

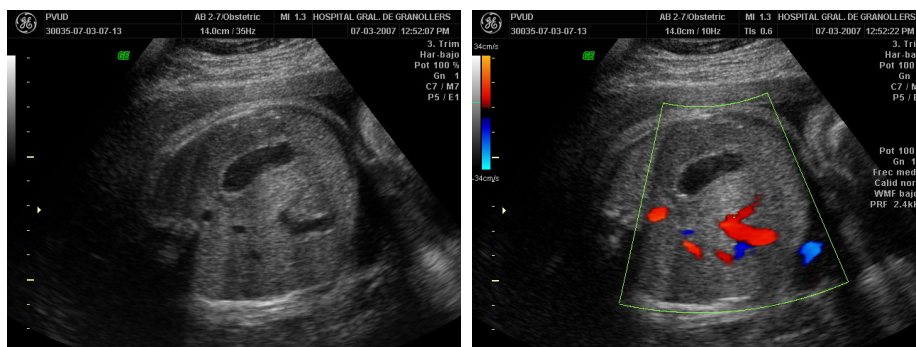
Methodology:

1. retrospective study, 20663 low-risk pregnancies, 14-year period
2. ultrasound diagnosis at 18-22 weeks' gestation

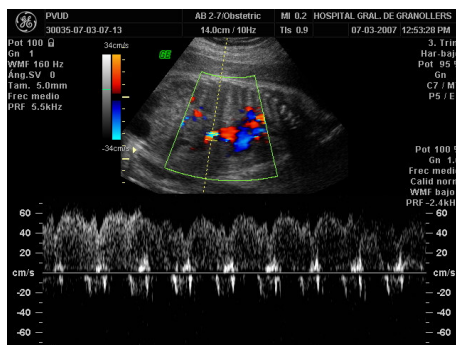
PRUV categorized into 2 groups:

- intrahepatic PRUV: ductus venosus present
- extrahepatic PRUV: absent ductus venosus

- detailed fetal sonographic examination and echocardiography
- postnatal follow-up or autopsy



Persistent right umbilical vein: portal vein was curved toward the stomach and the fetal gall bladder was located



Intrahepatic PRUV:
ductus

Results:

- incidence of PRUV: 0.15 % (n=30)
- no cases of extrahepatic PRUV
- 27 (90%) fetuses were normal and healthy at birth
- 3 associated congenital defects:
 - 1 cardiac malformation (hypoplastic left heart)
 - 1 unilateral renal agenesis
 - postnatally: small muscular ventricular septal defect
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Conclusions: After prenatal diagnosis of PRUV

1. In about 90% of the cases PRUV is an isolated finding with favorable outcome
2. Extensive detailed anatomic survey and echocardiography to rule out major congenital malformations are mandatory