**Objectives**

To evaluate the fetuses with single umbilical artery (SUA) at the second trimester screening, in order to establish its clinical significance.

**Methods**

The fetuses with SUA, discovered in our department, during ultrasound (US) examination at 16-24 weeks of all singleton pregnancies, were carefully surveilled during pregnancy, and the neonates have been evaluated.

**Results**

The incidence of SUA was 0.67% (22 of 3261 singleton pregnancies).

8 fetuses with SUA (36.3%) associated also others ultrasound abnormalities: cardiac anomalies (hypoplastic left hearth, atrial septal defect, coarctation of aorta, hyperechoic focus in the hearth), polycystic kidney, CNS anomalies (Dandy-Waker syndrome, borderline ventriculomegaly, choroid plexus cyst), digestive anomalies (esophagus atresia, hyperechoic bowel).

2 fetuses with associated anomalies proved to be aneuploidic (25%).

**Conclusion**

The single umbilical artery is an important finding during morphological ultrasound exam. If it is associated with other US anomalies, the fetal karyotype is mandatory, the risk of fetal aneuploidy being increased. The newborn must be carefully studied, in order to diagnose other anatomical anomalies missed at the prenatal evaluation.