Introduction
Arterial tortuosity syndrome (ATS) is a rare autosomal recessive connective tissue disease. The postnatal diagnosis is based on abnormalities observed in the skin, muscles, joints, heart and blood vessels. However, given the rarity of the disease the prenatal diagnosis would remain to be a challenge.

Case presentation
We report three cases of prenatal diagnosis of ATS of three consanguineous couples. The first two patients had previous history of children affected with ATS and the third patient had a personal medical history of ATS. None of the patients opted for prenatal invasive genetic diagnosis of ATS. All of the three cases had a normal first trimester and second trimester anatomy scans. The gestational age at ultrasound diagnoses of ATS were 28, 30 and 31 weeks in the three cases respectively. The ultrasound findings included elongated and tortuous major blood vessels such iliac vessels, main pulmonary artery with tortuous pulmonary branches and elongated tortuous aorta, with no evidence of obstruction in the three cases (figures 1, 2&3). hiatal hernia was prenatally detected in the second case. The first two patients delivered vaginally male infants at term while the third patient delivered by caesarean section a female infant at 35 weeks gestation. Caesarean was performed for fetal growth restriction and maternal increased risk of arterial dissection.

The postnatal neonatal examination and Echocardiography confirmed the prenatal ultrasound diagnosis. In addition, the genetic study confirmed SLC2a10 gene homozygous mutation in all of the three infants.

Conclusion
The diagnosis of ATS vascular abnormality can be challenging in the second trimester anatomy scan therefore high risk patients for ATS should be offered a fetal Echocardiography in the late second trimester as well as in the third trimester. Despite the rarity of the disease, high index of suspicion is needed to prenatally diagnose high risk and consanguineous couples.