Objective
To analyse the rate, main characteristics, associated conditions, outcome and postnatal clinical implications of right aortic arch (RAA) and double aortic arch (DAA) detected in fetal life.

Methods
Between 2004 and 2014, 62722 low risk pregnant women and 29024 high risk pregnant were scanned in our tertiary centre. All cases were prospectively diagnosed.

Results
DAA was found in 1 case, RAA was identified in 50 fetuses: 48 of them with the aberrant left subclavian artery and 2 with mirror image branching. 25 fetuses had a vascular ring. 19 cases of RAA were associated with other congenital heart diseases (5 of them with multiple anomalies) and 4 with extracardiac anomalies. 14 fetuses with RAA had normal karyotype. The pregnancy was terminated in 15 cases, 33 delivered at term and 2 still pregnant. 12 small cardiac defects were additionally detected after delivery. 25 children were followed-up from 1 to 10 years, 12 of them have clinical signs of tracheal and esophageal compression caused by a vascular ring.

Conclusion
The diagnosis of a right-sided aortic arch can be made by fetal echocardiography, either as an isolated lesion or in association with other cardiac malformations, from as early as 11 weeks of gestation. Isolated RAA has a good prognosis, and in half of the children it is an asymptomatic vascular variant with a relatively low risk for chromosomal abnormalities. The prognosis of RAA with CHD depends on the complexity of the CHD and/or the associated extracardiac anomalies.