

## ULTRASOUND MARKERS FOR THE PRENATAL DIAGNOSIS OF SCIMITAR SYNDROME

*S. Lakshmy, S. Umapathy, A. Murugan Rajee, S. Ramakrishnan, V. Ravi, Shri Lakshmi Clinic and Scan Centre, Krishnagiri, India*

**Introduction:** Scimitar syndrome is a rare congenital anomaly characterized by right lung hypoplasia and partial anomalous pulmonary venous drainage to the inferior vena cava. The prenatal diagnosis of Scimitar syndrome is scarce in the literature and the objective of the study is to present ultrasound markers that aid in the diagnosis of scimitar syndrome. Most often, the diagnosis of scimitar syndrome is done by demonstration of the anomalous curved pulmonary vein - the 'Scimitar vein' in prenatal ultrasound.

**Methods:** 6 cases of scimitar syndrome were reviewed for the presence of four ultrasound markers namely mediastinal shift, a small right pulmonary artery, inadequate demonstration of normal drainage of right sided pulmonary veins and demonstration of scimitar vein.

**Results:** The gestational age at diagnosis ranged from 19 weeks to 25 weeks in 6 cases. All 6 cases (100%) showed a mediastinal shift with dextroposition of fetal heart, whereas demonstration of the Scimitar vein was possible only after 22 weeks of gestation. The Scimitar vein could be demonstrated in 67 % (4/6) of cases. Small right pulmonary artery was seen in 50% (3/6) of cases. Inadequate demonstration of normal drainage of right sided pulmonary vein was seen in 50 % (3/6) of cases. In one case, the only demonstrable finding was mesocardia which was postnatally diagnosed as Scimitar syndrome.

**Conclusion:** The primary clue to the diagnosis of scimitar syndrome is the mediastinal shift seen in the four-chamber view. Dextroposition of the fetal heart in the absence of left sided CDH or focal echogenic lung lesions should raise the suspicion of Scimitar syndrome. The demonstration of Scimitar vein is possible only in late mid-trimester and is not the primary clue for the diagnosis of scimitar syndrome.

*drlakshmiravi@gmail.com*

