Introduction: Congenital left coronary ostial atresia or severe stenosis is an extremely rare coronary abnormality. The clinical picture is either cardiac failure in the small infant or chest pain in the older child or adult patient. This report describes four neonatal cases of this rare abnormality.

Methods: We retrospectively reviewed all cases of congenital left coronary ostial atresia or stenosis presenting in our center between April 1998 and April 2010. All cases were analyzed according to case reports and small series. The clinical picture described here for the first time in the neonate is dramatic and quickly fatal with scarce surgical options. Systematic examination of the coronaries should be part of any neonatal autopsy.

Results: Four neonates with the diagnosis of left coronary ostial atresia or stenosis were identified during the study period. One newborn died within minutes, the other within hours after birth because of cardiac failure refractory to all treatment strategies. In both cases left coronary stenosis (one case with a “pinpoint” orifice and the other with a “slitlike” orifice) was diagnosed at autopsy. The third neonate was in cardiac failure due to a severe aortic stenosis. Left coronary ostial atresia was diagnosed during emergency catheter procedure. The infant subsequently died after the aortic dilatation. The fourth infant had a cardiac arrest at the third day of life after normal delivery and neonatal adaptation. She was diagnosed with left coronary ostium atresia by coronary angiography performed because of persistent biventricular dysfunction. She died during the attempt of revascularization surgery at 2 weeks of life.

Conclusion: Congenital left coronary ostial atresia or stenosis is very rare. Coronary angiography is the diagnostic method of choice especially in the small child or infant. Revascularization surgery seems indicated in symptomatic children based on case reports and small series. The clinical picture described here for the first time in the neonate is dramatic and quickly fatal with scarce surgical options. Systematic examination of the coronaries should be part of any neonatal autopsy.

The transcatheter closure of Atrial Septal Defect (ASD) in patients older than 60 years: Retrospective study of 41 cases

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Introduction: Transcatheter closure of ASD is now proposed as first line treatment for the elderly patients.

Purpose: The aim of our study is to evaluate the transcatheter closure of ASD in patients older than 60 years.

Methods: The records of 41 patients (37 women, 4 men) who are over 60 years (69.8±6.6 years, range 61-82 years), referred between April 1998 and December 2010 for transcatheter closure of secundum ASD, were retrospectively reviewed.

Results: ASD was discovered during the assessment of patients with dyspnea (17) or arrhythmia (17). Average age at time of diagnosis was 62.4±14.89 years (range 14-82 years). 37.8% of cases had a delayed diagnosis.

At time of the procedure, 19 patients (46.3%) had supraventricular arrhythmia and 82.9% of patients were dyspnic. Shunt ratio was 2.50±0.66, defect size 19.67±9.76 mm, stretched diameter 24.36 mm±5.87, device diameter of 24.49 mm±6.58. One patient was recused, because of increased left atrial pressure at occlusion test.

Fluoroscopy time was 7.01±4.41 min. Success rate is 97.5%. Complete closure rate at one day and one month was 84.6% and 94.9% respectively. Systolic pulmonary pressure decreased from 49.37 to 34.5 mmHg at one month.

Hospital stay was 3.58 days ± 2.71. Periprocedural complication rate was 12.2%. 2 complications were major: one death by esophageal hematoma, and one oropharyngeal bleeding, and 3 minors: 3 femoral arteriovenous fistulas.

At late follow-up (34±44 months, range 1month to 12 years), 34 patients were in stage one, 4 recurred supraventricular arrhythmia, 1 needed pace maker for sinus node dysfunction.

Conclusion: Transcatheter closure of ASD in elderly patients is effective. It does not change rhythmic status but allows symptomatic improvement.