**ACQUIRED AORTIC ATRESIA CATHETER THERAPY USING COVERED STENTS**

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**Introduction**: To maintain aortic continuity, aortic arch interruption is usually treated surgically. We present our experience of aortic arch reconstruction using percutaneous implantation of covered stents and mid-term follow-up.

**Objective**: To describe the feasibility, safety, and effectiveness using percutaneous placement of covered stents for functional aortic atresia and mid-term follow-up.

**Method**s: Ten patients (8 males), mean age of 30.8 616.2 years (range 13-58 years) and mean body weight of 65.76 14.9 kg (range 52-95 kg), were investigated for systemic hypertension and found to have functional aortic interruption. All were treated with percutaneous perforation, combined with balloon dilation and implantation of covered stents. After stent implantation, control angiograms were performed.

**Results**: All the patients had functional aortic interruption and continuity was established by perforating the atretic segment with trans-septal Brockenbrough needle or the stiff end of a guide wire. A covered Cheatham-Platinum CP stent was used to establish the luminal continuity of the aortic arch. Angiograms after stent deployment showed good forward flow through the stent and hemodynamic assessment revealed minimal gradients across the stent. The mean invasive descending aortic systolic blood pressure before stenting was 86.6 6 14.3 mm Hg, which increased to 116.5 6 16.3 mm Hg, after stenting (P 5 0.004). The mean invasive descending aortic diastolic blood pressure before stenting was 63.6 6 8.1 mm Hg, which increased to 79.7 6 13.3 mm Hg after stenting (P 5 0.002).

**Conclusion**: Percutaneous treatment of functional aortic atresia with covered stents is feasible, safe, and effective alternative to surgery with excellent short- and mid-term results.