**THE OUTCOME OF TRANSCATHETER PATENT DUCTUS ARTERIOSUS CLOSURE IN PATIENTS WEIGHING ≤ 8KG**

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Objective: The study aims to find safety of transcatheter closure of patent ductus arteriosus in patients weighing <8kg.

Background: Long term results of percutaneous patent ductus arteriosus using coil or amplatzer duct occluder are excellent.

Methods: Atotal of 79 patients having isolated PDA weighing ≤8kg with minimal diameter <2mm from august 1997 to December 2009 were included in this study and have been followed up until May 2010.The patients were assigned to either coil or device closure according to the PDA morphology and size.

Results:Seventy nine patients aged 2-49.2 months (median 10.4 months), 57 females (72.15%) and 22 males(27.85%) , weighing 3.7-8.3 kg (median 6.7 kg),one patient ≤4kg and 78 patients >4kg, had PDA size between 1-8mm (median 3.5mm). Twenty one patients had coil closure and 58 patients had amplatzer device closure on median follow-up of 1.8 years ,there were one patient with minimal residual flow, and two patients with peak velocity >2meter/second across LPA and six patients had >2meter/seconds across the aorta.

Conclusions: Transcatheter closure of patent ductus arteriosus by amplatzer device considered safe and effective in infants weighing ≤ 8 kg, decision on coil versus devices depend on ductal morphology. In our experience few patients had aortic and LPA gradient.