TRANSCATHETER CLOSURE OF PATENT DUCTUS ARTERIOSUS IN PREMATURE INFANTS WEIGHING LESS THAN 2,500 GRAMS

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BACKGROUND
Transcatheter closure of patent ductus arteriosus (PDA) in preterm babies remains a highly challenging procedure.

OBJECTIVE
The aim of this study was to describe our experience with transcatheter device closure of PDA in symptomatic low birth weight premature infants.

METHODS
Hospital records and catheterization reports of all premature babies who underwent transcatheter PDA closure since October 2014 in our hospital were reviewed. Basic demographics clinical information, echocardiographic, and angiographic data were recorded.

RESULTS
Six premature infants (three boys and three girls) born at gestational ages ranging between 24 and 33 weeks (median, 28 weeks) were identified. All patients were symptomatic and received at least one course of indomethacin therapy. Median age and weight for procedure was 32 days (17-102 days) and 1,500 g (1,032-2,350 g), respectively. The mean minimal ductal diameter was 3.7 ± 0.7 mm. Device used in this study were Amplatzer Ductal Occluder II additional size (ADO II AS) (n=4), Amplatzer Vascular Plug I (n=1), and Vascular Plug II (n=1). Complete closure was achieved in all patients with no major procedural complications.

CONCLUSIONS
It is currently feasible to undertake transcatheter PDA closure in carefully selected symptomatic premature infants.