Percutaneous PDA Closure In Preterms Less Than 2 Kg

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Introduction

Preterms and low birth weights are the group that PDA is most common and intervention is most risky. Main aim of our study is to emphasize the effectiveness and safety of percutaneous PDA closure in the infants less than 2kg.

Material Method

Between the dates July 1997 to October 2014 in our center 382 PDA closures were done. 18 patients less than 2kg were included in this study. Demographic and angiographic data of the patients were reported.

Results

All the patients were symptomatic and PDA was decided to be contributor of this medical state. The median patient age 32days. The median weight of patients was 1603gr (910-2000gr). Mean PDA diameter was 3.2±1.3mm. Morphology of PDA: type A in 7 patients, type C in 9 patients, type E in 1, type B in 1 patient. Types of the devices used were: Cook coil in 2 patients, ADOI in 2, ADOII in 3, ADOII-AS in 11 patients. There were no major complications reported. Left pulmonary arterial stenosis was detected in 4 patients which were all resolved in 6 months duration.

Conclusion

Preterm complications like chronic lung disease, necrotising enterocolitis etc. increase the mortality and morbidity. In order to decrease the complications early intervention is required but surgery could be too risky. Because of the risks of surgery in the recent years interventional catheterization procedures are more commonly used.

Up to our knowledge it is the only study that discuss safety and effectiveness of percutaneous PDA closure in the infants less than 2 kg. Patient population less than 2 kg are preterms and most have additional health problems that the surgery could be dangerous but catheterisation can be used safely.