

Title: Interventional cardiac catheterization in congenital heart disease (Morrocan experience)

Category: Interventional Cardiology

Abstract

Background: Cardiac catheterization was considered the gold standard for confirmation of diagnosis and analyzing various management issues in congenital heart diseases. It is now frequently used for therapeutic reasons.

Purpose: Our study aims to describe the current state of Interventional pediatric catheterization and analyze the result, and the main complications of the performed procedures.

Methods: This was a retrospective study conducted in the Cardiology department in conjunction with the Pediatric Resuscitation-Anesthesia department at the University Hospital Center of Casablanca from January 2013 to June 2017, including patients having undergone pediatric catheterization.

Results: 50 patients were included. The male sex was more common with a sex ratio of 1,4 and the mean age was 5,5 years. 74% of patients underwent interventional catheterization; the indications were Rashkind's atrioseptostomy (26%), dilatation of pulmonary stenosis (21%), patent ductus arteriosus closure (17%), atrial septal defect closure (15%), ventricular septal defect closure (12%), dilatation of coarctation of the aorta (6%) , aortic valve dilatation (3%) and the success rate was 95%.

A diagnostic catheterization was performed in 26% of cases mainly in the Tetralogy of Fallot (31%) and the Ventricular septal defect (23%) in order to explore the anatomy, the hemodynamics and to look for pulmonary hypertension that will determine the operability ; 67% were operable.

Complications occur in 18% of cases including post-procedure infection (4%), death (4%) by cardiorespiratory arrest and septic shock, bleeding from the puncture site (4%), acute limb ischemia (2%), extreme bradycardia (2%) and allergic reaction to contrast (2%).

Conclusion: Interventional pediatric catheterization has grown remarkably in Morroco. These procedures have become the treatment of choice for many cardiac lesions, and serve as alternatives or adjuncts to surgical treatment .