

Abstract No. **46**

Category: **Vascular Medicine**

Title: **Prevalence and type of complications associated to pediatric cardiac catheterization in Clinica Cardiovid - Medellín**

**2009 – 2017**

Primary Author: **Rafael Lince**

**Abstract:**

Background: congenital heart disease is the most common congenital anomaly in newborns with a prevalence of 1%. Diagnostic and therapeutic cardiac catheterization has revolutionized the management of these diseases; however, it is not a procedure free of complications.

Objective: to describe the incidence and type of complications associated to pediatric cardiac catheterization in a reference center for congenital heart disease in Medellín – Colombia.

Methods: descriptive, longitudinal, retrospective study based on records from cardiac catheterizations performed on patients under 18 years of age due to congenital or acquired heart disease, on a nine – year period.

Results: a total of 2688 records were included. 53.9% correspond to male patients, 21.3% with ages between 2 and 5 years and 20.3%, between 6 months and 2 years. 63.5% were elective procedures. The incidence of complications in the first 24 hours after the catheterization was 6.7% (4.2% were minor complications and 2.4%, major). From the total of complications, 0.8% correspond to death. A significant association was found with the following variables: age at catheterization less than 28 days (OR 2.18, CI 95% [1.28 – 3.70]), oxygen saturation previous to catheterization less than 79% (OR 2.15, IC 95 % [1.02-4.53]) and use of inotropes before catheterization (OR 3.00, IC 95 % [1.68-5.33]). The variables included in the binary logistic regression model explained 38% of the variance of cardiac catheterization complications in patients under 18 years of age.

Conclusion: cardiac catheterization was associated with minor and major complications including death. The incidence of complications is similar to that reported by other centers of pediatric hemodynamics in the world. A younger age at the time of catheterization, an oxygen saturation less than 70% and the use of inotropes before the procedure, were associated with a greater risk of early complications related to the catheterization.