

Perioperative Management of Transposition of the Great Arteries: Our Experience with 22 Newborns

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Abstract

Background: Transposition of the great arteries (TGA) is a critical congenital heart defect requiring timely surgical intervention.

Methods: This study presents our perioperative management protocol and outcomes in 22 newborns who underwent arterial switch operation (ASO) at Mother Teresa University Hospital Center in Tirana from June 2019 to June 2024. Key aspects include preoperative stabilization, surgical techniques, and postoperative care.

Results: All patients successfully underwent ASO, with one requiring reoperation for bleeding. Postoperative complications included low cardiac output syndrome (14%), transient arrhythmias (9%), and mild pulmonary

hypertension (18%). One patient (4.5%) died due to refractory LCOS and sepsis. The median ICU stay was 5 days, and the median hospital stay was 10 days.

Conclusion: These findings highlight the importance of structured, multidisciplinary collaboration in optimizing outcomes for newborns with TGA, though further studies with larger samples are needed to refine management strategies.

Keywords: Prenatal diagnosis, Transposition of the Great Arteries, Congenital Heart Disease, Cardiac Anesthesia