

MEETING ABSTRACT

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Cardiac surgery in adults with congenital heart disease: an African perspective

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Background/Introduction

A paucity of data exists on the spectrum and outcome of adult patients undergoing congenital heart surgery (CHS) on the African continent.

Aims/Objectives

This study was undertaken to understand the local disease profile and needs of this patient group and so to facilitate planning for future provision of cardiac services.

Method

A retrospective chart review was undertaken of all consecutive adult patients (≤ 18 years) undergoing CHS in a single African tertiary care hospital between October 1995 and January 2015. Patients and operative outcomes were described using the Society of Thoracic Surgeons CHS database form.

Results

A total of 220 operations were performed in 209 patients (45% male). Mean age at surgery was $30,1 \pm 10,9$ years. Preoperative diagnostic cardiac catheterization was performed in 86,3% of patients. The most common lesions according to primary diagnostic category were as follows: Septal defects (43,6%), Right heart lesions, including Conduit failure (23,7%), Left heart lesions (10,5%) and Thoracic arteries and veins (8,6%). Single ventricle lesions comprised 2,7% of diagnoses. Fifty-four percent of patients presented in the moderate or complex Bethesda diagnostic classes. Preoperative risk factors were present in 19,1% of patients with endocarditis, renal dysfunction and severe pulmonary hypertension the most frequent. Reoperations constituted

28,6% of procedures performed. Right ventricle to pulmonary artery conduit placement constituted 50,8% of the reoperations. Overall operative mortality was 1,8% ($n = 4$) with 4,8% ($n = 3$) mortality in the reoperation group. Postoperative complications occurred in 26,8% of patients. The mean Aristotle Basic Score was $6,2 \pm 2,4$.

Discussion/Conclusion

Surgical treatment is feasible in the African context with low mortality and acceptable morbidity in spite of limited resources. Our patient profile was similar to that reported in a recent multicentre European series. Our utilization of diagnostic cardiac catheterization seemed excessive. More than half of our patient group will require long-term specialized care.

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