Cardiac surgery for patients with heart failure due to structural heart disease in Uganda: access to surgery and outcomes: cardiovascular topic

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## **Abstract**

Few data are available on heart failure (HF) in sub-Saharan Africa. We aimed to provide a current picture of HF aetiologies in urban Uganda, access to heart surgery, and outcomes. We prospectively collected clinical and echocardiographic data from 272 consecutive patients referred for suspected heart disease to a tertiary hospital in Kampala during seven non-governmental organisation (NGO) missions from 2009 to 2013. We focused the analysis on 140 patients who fulfilled standardised criteria of HF by echocardiography. Rheumatic heart disease (RHD) was the leading cause of HF in 44 (31%) patients. Among the 50 children included (age ≤ 16 years), congenital heart disease (CHD) was the first cause of HF (30 patients, 60%), followed by RHD (16 patients, 32%). RHD was the main cause of HF (30%) among the 90 adults. All 85 patients with RHD and CHD presented with an indication for heart surgery, of which 74 patients were deemed fit for intervention. Surgery was scheduled in 38 patients with RHD [86%, median age 19 years (IQR: 12-31)] and in 36 patients with CHD [88%, median age 4 years (IQR 1-5)]. Twenty-seven candidates (32%) were operated on after a median waiting time of 10 months (IQR 6-21). Sixteen (19%) had died after a median of 38 months (IQR 5-52); 19 (22%) were lost to follow up. RHD still represents the leading cause of HF in Uganda, in spite of cost-efficient prevention strategies. The majority of surgical candidates, albeit young, do not have access to treatment and present high mortality rates.

**Keywords:** Congenital heart disease, Echocardiography, Heart failure, Heart surgery, Rheumatic heart disease

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