

Challenges in surgical management of cardiac valvular lesions in a tertiary sub-Saharan centre

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The aim of the study was to investigate the pattern of valvular lesions, the early post surgical mortality, and challenges in the care of operated patients in St. Elizabeth Catholic General hospital, cardiac centre.

Patients and methods: This retrospective analysis included 116 patients aged between 6 and 64 years old who underwent mitral repair or replacement and/or aortic valve replacement or repair in the cardiac centre from its inauguration in November 2009 through June 2011. Data from patients' records, operative intervention, and preoperative and postoperative two-dimensional echocardiographic studies were reviewed. Patients and their family were contacted a month, and three months after been discharged from the hospital and later every three months. The duration of the follow-up was from 3 months to 20 months.

Results: 116 patients aged between 6 and 64 years old with a mean age of $45 \pm 6,5$ years old underwent surgical correction of mitral and or aortic valvulopathy. Mitral regurgitation was the commonest echocardiographic diagnosis present in 51.7% patients; 13,3% patients had mixed mitral valve disease, 35% had pure mitral stenosis. Before surgery, 3 patients were in class IV, 10 in class III, 12 in class II and 4 in class I according to the New York Heart Association's classification. Patients were extubated from 5-10 hours after surgery with low doses of inotropes. The mean stay in intensive care unit was 1.5 ± 0.5 days. The drains were removed at the $3^{\text{rd}} \pm 1,5$ post surgical day in the ward. In the early post surgical period, the ejection fraction (EF) changed from $45,3 \pm 1,5$ % to $56,1 \pm 1,4$ % ($p < 0,005$) in 3 months and stayed almost the same after six months $57,2 \pm 2,7$ % ($p > 0,05$); at nine months it was $55,1 \pm 1,8$ % ($p > 0,05$), at 12 months - $58,4 \pm 1,7$ % ($p > 0,05$), at the latest patient's check up, the EF was $56,2 \pm 1,3$ % ($p > 0,05$); however the basal part of the interventricular septum was hypokinetic. The changes of the left ventricular diastolic diameter (LVIDD) were as follow: from $57,2 \pm 1,5$ mm to $55,3 \pm 1,1$ mm ($p < 0,05$) after 3 months, $54,2 \pm 2,7$ mm ($p > 0,05$) after six months; after nine months, it was $55 \pm 1,8$ mm ($p > 0,0$). We could not identified the real cause of death in the patients because of lack of human resources and logistics however according to the relatives, we could think of sudden death, as the first cause, infectious diseases. The challenges faced are patients' negligence and poor discipline, wrong beliefs, poverty.

Conclusion: Post rheumatic mitral valve regurgitation is the pathology the most encountered. The study showed very good early results in the post surgical follow-up of patients with valve replacement for the correction of post rheumatic valvulopathies. Post surgical echocardiogram is characterised by motion abnormalities of the basal part of the interventricular septum. Due to financial limitation poverty and illiteracy of parents, the post surgical follow up of patients is challenging.

Biography

Tantchou T J Cabral has completed his Ph.D at the age of 30 years from the State Medical University Kharkov. He is the chairman of the scientific committee of the cardiac centre Shisong and lecturer at the medical school of health sciences of the Catholic University, Bamenda. He has published more than 20 papers in reputed journals.

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