

# 3<sup>RD</sup> WORLD HEART CONGRESS

April 19-20, 2018 Amsterdam, Netherlands

## Rheumatic mitral stenosis in children: More accelerated course in Sub-Saharan patients

Henok Tadele

Hawassa University, Ethiopia

**Background:** Mitral stenosis, one of the grave consequences of rheumatic heart disease, was generally considered to take decades to evolve. However, several studies from the developing countries have shown that mitral stenosis follows a different course from that seen in the developed countries. This study reports the prevalence, severity and common complications of mitral stenosis in the first and early second decades of life among children referred to a tertiary center for intervention.

**Methods:** Medical records of 365 patients aged less than 16 and diagnosed with rheumatic heart disease were reviewed. Mitral stenosis was graded as severe (mitral valve area <1.0cm<sup>2</sup>), moderate (mitral valve area 1.0-1.5cm<sup>2</sup>) and mild (mitral valve area >1.5cm<sup>2</sup>).

**Results:** Mean age at diagnosis was 10.1±2.5 (range 3–15) years. Of the 365 patients, 126 (34.5%) were found to have mitral stenosis by echocardiographic criteria. Among children between 6–10 years, the prevalence of mitral stenosis was 26.5%. Mean mitral valve area (n=126) was 1.1±0.5cm<sup>2</sup> (range 0.4-2.0cm<sup>2</sup>). Pure mitral stenosis was present in 35 children. Overall, multi-valvular involvement was present in 330 (90.4%). NYHA functional class was II in 76% and class III or IV in 22%. Only 25% of patients remember having symptoms of acute rheumatic fever. Complications at the time of referral include 16 cases of atrial fibrillation, 8 cases of spontaneous echo contrast in the left atrium, 2 cases of left atrial thrombus, 4 cases of thrombo-embolic events, 2 cases of septic emboli and 3 cases of airway compression by a giant left atrium.

**Conclusion:** Rheumatic mitral stenosis is common in the first and early second decades of life in Ethiopia. The course appeared to be accelerated resulting in complications and disability early in life. Echocardiography-based screening programs are needed to estimate the prevalence and to provide support for strengthening primary and secondary prevention programs.

henny\_2007@yahoo.com

## Notes: