

## **Prosthetic thrombosis and pregnancy on warfarin: Debate on mechanical mitral valve replacement in sub-Saharan Africa based on a case report**

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### **Abstract**

Rheumatic heart disease (RHD) is the most common cardiovascular disease in children and young adults in the world. Echocardiographic screenings have documented a large prevalence of RHD in sub-Saharan Africa; there is, however, a great discrepancy in prevalence data due to different clinical and echocardiographic diagnostic criteria of probable or possible RHD and mean age of the screened population. Advanced valve disease requires cardiac surgery, which is not routinely available in many developing countries, as is the case of Uganda. RHD affects mainly the young of both genders. Mitral valve is the most commonly affected, and mitral regurgitation (MR) the most common manifestation. Surgical repair of rheumatic mitral lesions is complex and need for replacement is frequent. When valve replacement is planned for sub-Saharan patients, the choice between biological and mechanical prosthesis represents a major issue. Monitoring international normalized ratio (INR) to guide oral anticoagulant dosage can be expensive and difficult, particularly in rural areas, and adherence to oral anticoagulation regimens may be low, thus patients with mechanical valve prosthesis are at increased risk both for valve thrombosis and major bleeding. In female patients, moreover, the need for anticoagulation may preclude or complicate pregnancy.

**Keywords: Prosthetic valve, Rheumatic heart disease, Africa, Anticoagulation, Pregnancy**

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