A new tricuspid ring: A unique device with assisted multiple choice

Wajih Maazouzi
National Institute of Science & Technology Engineers, Morocco

The prosthetic annuloplasty has asserted itself as treatment of tricuspid insufficiency. Among the main available rings, those semi-flexible, incomplete, 2D or 3D, accumulate advantages of both ventricular kinetics and anatomic specific features preservation of the tricuspid apparatus. But the spread of annuloplasty methods in developing countries has been facing a triple problem: not only the physiologic one, but also economical and technical reproducibility ones. Whatever the model, its multicomposite structure seems have been dictated by the care of interrupted suture fixation. The conception of the Unic Ring with Multiple Choice (URMC) opens to bring a solution to this triple care. The URMC, monocomposite and exclusively made of PTFE, combines 3 rings different in size and shape, separated by grooves for cutting purpose thanks to a surgical blade knife. The selection of adequate ring is operated by the use of a multigraded and transparent tester provided in 3 layers destined to measure each of the 3 tricuspid leaflet. Furthermore the URMC include perforations allowing easy suture in continuous way. The author reports his experience of a first serial of implantations, focusing on the fast learning potential of the device regarding to young surgeons who are not familiar with tricuspid annuloplasty.