

Aortic valve reconstruction workshop

AUTHORS:

HRVOJE GAŠPAROVIĆ
GEBRINE EL KHOURY

Historically, aortic valve replacement has been the gold standard for the management of aortic stenosis and insufficiency. While the former pathology still remains, almost exclusively, the subject to replacement, patients with aortic regurgitation are increasingly offered reconstruction of their valve. The only similar option for aortic stenosis is commissurotomy, which is a procedure reserved for the pediatric population. Its limited durability makes it inappropriate for adults. Conversely, aortic valve repair in the setting of aortic valve regurgitation has become increasingly more popular. Its appeal and superiority stem from the reduction of foreign material within the bloodstream with a subsequent reduction in infectious and thrombotic potentials, as well as the reduction of anticoagulation and its bleeding associated complications. Of importance is also the fact that it provides superior hemodynamics. Surgical techniques of aortic valve repair are complex and designed to address a specific morphologic feature of the regurgitant aortic valve. The procedure frequently involves remodeling or replacing the entire aortic root, whilst preserving the native valve. There are two major surgical options. These are the remodeling and the re-implantation techniques of valve sparing aortic root replacement. Regardless of the employed surgical technique, understanding the complex geometry of the aortic root is paramount. Bicuspid aortic valve morphology adds another layer of complexity to an already complex operation. This goal oriented workshop aimed to provide its participants with an opportunity to refine their skills and add new skills to their surgical armamentarium. Aortic valve reconstruction provides an important new avenue of management for patients with aortic regurgitation. Providing reproducible and durable results is crucial in wider dissemination of these techniques.

