Years of Clinical Expertise with the Bentall Procedure

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Background. We retrospectively analyzed 42 years of experiences with the button Bentall procedure in patients with aortic root pathologies. Even though this procedure has become widespread worldwide, there are no follow-ups available in Syria. Since it is considered as one of, if not, the most dangerous cardiac surgery operation in our hospital, it is very important to be certain about its safety, taking into consideration the circumstances in our country.

Methods. Between 1990 and 2017, we studied patients underwent the Bentall procedure at our hospital. The impact of surgical experience on survival was evaluated.

Results. Multivariate analysis revealed no independent risk factors. Risk factors for morbidity were etiology of acute dissection, use of circulatory arrest, transfusion of blood and fresh frozen plasma more than 2 units each, cross clamp and cardiopulmonary bypass times (exceeding 90 and 140 minutes, respectively), and performing concomitant procedures.

Conclusion. Modified Bentall procedures are safe in general. Meticulous dissection, careful handling and positioning of the coronary buttons are of paramount importance since technical errors are an important factor responsible of bad surgical outcomes. Our study was necessary to gain such a level of confidence and experience to acquire better results on long-term survival. Aortic root replacement can be performed safely with low mortality and acceptable morbidity. In our experience, the Bentall procedure provided optimal survival with improved functional status. The disease of the aorta may progress, especially in patients with Marfan syndrome. Therefore, careful follow-up with regular computed tomography angiograms should be performed in these patients.

Keywords: Bentall procedure, Aortic root replacement, Cardiac surgery, Single center experience, Mortality and morbidity, Risk analysis.

Biography

Lubna Bakr is the first female cardiac surgery resident in Damascus University and its hospitals. She is a young enthusiastic cardiac surgeon who seeks knowledge as a cardiac surgeon at the largest and most prestigious health facilities and devotes her time to patients with cardiac health issues. She is an honors student for her academic achievement in High School national exams at the level of Syria. She earned first-place honors for her achievement in Al-Bassel High School for Outstanding & Gifted Students for six years in a row. She is a winner of many national cultural competitions by Syrian Revolutionary Youth Union. She was the presenter of UNICEF conference about children and little girls rights in Syria, 2003. She is also a pioneer in mathematics at the country level after winning national competitions by Syrian Al-Baath Vanguards Organization for three years in a row.

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