

Multivalve surgery in adults with congenital heart disease

*Polo Lopez L., Sanchez Perez R., Gonzalez Rocafort A., Rey Lois J., Bret Zurita M., Ruiz Cantador J., Abelleira Pardeiro C., Ortega Molina M., Aroca Peinado A.
La Paz University Hospital, Madrid, Spain*

Introduction: Grown-up congenital heart (GUCH) patients are a growing population formed by youth people with high complexity related to the particular type of cardiopathy itself and previous surgeries. During the last 12 years in our GUCH unit we have operated 232 patients with extracorporeal circulation (ECC). Multivalve surgery is growing along time, reaching 18,9% of our whole activity. We present here our experience with these patients requiring simultaneous surgery in 2 or more cardiac valves.

Methods: Retrospective study of 44 patients operated in our GUCH unit (surgery in 2 or more cardiac valves at the same time), in the period (December-2003-November-2015). Statistical study with SPSS-15.0

Results: Mean age: 40 ± 12 years (range: 18,75-74), 54,5% women. Main heart disease: Fallot in 52,3% and pulmonary stenosis in 15,9%. Previous surgeries in 95,5%. Preoperative functional class III-61,5% and IV-12,8%, history of arrhythmia in 69,8%. Principal indications for surgery related to valve incompetence: pulmonary-79,1%, mitral-14%, aortic-7%. Surgical techniques employed: 89% with 2-valve surgery, 11% with 3-valve surgery, more frequent surgery performed: pulmonary bioprosthesis + tricuspid plasty/bioprosthesis in 23 patients (52%). Associated surgery in 26 patients (59%) mainly consisted in closing a residual septal defect. Median ECC time was 194 minutes (IQR: 135-292), and aortic cross-clamp time was 136 minutes (IQR: 99-152). Hospital mortality: 2(4,5%), was better than expected with the preoperative risk scales (97,7% in RASCHS category-3, mean EACTS: $7,5 \pm 0,81$, and mean Euroscore: $9,7 \pm 7,7$). Hospital morbidity: 14(33%).

Follow-up was complete, with mean $3,9 \pm 3,9$ years (maximum 12,5). Late mortality 2(4,7%), without new reoperations with ECC. Nowadays, functional class is I-37,5% and II-53,1%.

Conclusions: Multivalve disease in GUCH patients is a challenge with high risk. We operate these patients in our GUCH unit with good results (low mortality and improvement of clinical status), in low and medium-time follow-up.