

GUCH POPULATION: CARDIOLOGIC AND SURGICAL DEMANDS

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To evaluate the cardiologic and surgical demands of the GUCH population followed up in our Department, a retrospective analysis of 709 hospital admissions (HA) of 536 pts (mean age 34 ± 16 , range 16-79 years), carried out from 1997 to 2002, has been performed. In 293 pts the basic cardiopathy was simple (SC), in 158 of moderate complexity (MCC) and in 85 of great complexity (GCC). The reason for 169 HA was cardiac surgery and for 537 HA cardiologic issues. The overall HA/pt was 1.3 (1.1 in SC, 1.3 in MCC, 2.1 in GCC).

In 166 surgical pts, 171 operations were performed. First operations (n=105, 62%) were most commonly for atrial septal defect (n=50, 48%), aortic valve replacement (n=11, 10%), ventricular septal defect (n=8, 8%). Reoperations (n=64, 38%) were divided among reintervention after corrective repair (n=45, 70%), further palliation (n=17, 26%), first palliation (n=2, 4%) and the most frequent were: Fontan operation (n=11, 17%), RV-PA conduit replacement (n=8, 12%), aortic valve replacement (n=6, 9%). The mean hospital stay was 19 ± 17 days. Pleuro-pericardial effusion (n=32, 18%), bleeding (n=11, 6%) and arrhythmias (n=11, 6%) were the most prevalent complications. Early mortality (n=7/171, 4%) was influenced by cyanosis (6 of 33, 18% in cyanotic pts; 1 of 136, 2% in acyanotic, $p<0,001$) and by complexity of cardiopathy (n=6 of 43 GCC, 14%; n=1 of 72 MCC, 1%; 0 of 54 SC, 0%, $p<0,001$) that was a risk factor also for more serious complications (20% in GCC, with respect of 9% in MCC, $p<0,05$ and 4% in SC, $p<0,001$).

The principal reasons for 537 cardiologic HA in 432 pts, were: interventional procedures (n=209, 39%), diagnostic catheterisation (n=155, 29%), non invasive evaluation (n=95, 18%), arrhythmias (n=46, 10%). Closure of atrial septal discontinuity (n=167, 80%), patent ductus arteriosus (n=21, 10%), pulmonary valvuloplasty (n=8, 4%) and angioplasty of Coarctation (n=6, 3%), were more prevalent interventional procedures. In pts with GCC, heart failure and cyanosis were more commonly cause of HA than in MCC and SC ($p<0,001$).

Despite the progress of pediatric cardiology and cardiac surgery, medical demands of GUCH remain numerous and complex throughout their lives. Therefore, it is extremely important to provide specialized surgical and cardiologic care for this complicated population.