Sex and Age Features in Adults with Congenital Heart Disease: Experience from a Tertiary Centre in Ukraine

Lebid I., Khanenova V., Stogova O., Rudenko N., Yemets I.
Ukrainian Children’s Cardiac Center, Kyiv, Ukraine

Objectives:
To determine age peculiarity and risk factors depend on sex in adults with congenital heart disease ACHD presented at our institution

Methods:
Between 01.04.2011 and 31.12.2015, there were 2044 consecutive ACHD (11 patient’s groups by nomenclature - more than 40 pts in a group). All patients divided for patients who had a surgical/percutaneous intervention initially and never operated and two groups: Gr1 - ACHD after interventions in adulthood, Gr2 - adults, without any procedures elder 18 years

Results:
Of 2044 ACHD, 1059 (52%) were male and 985 (48%) women, median age 26.23±0.24 (18-88 years). There was domination patients after surgical/percutaneous intervention (n=1295; 63.4%), compare without any intervention (n=749; 36.6%). Gr2 (n=1625; 79.5%) were prevailing compared Gr.1 (n = 419; 20.5%). Overall mortality was 0.34% (n=7), 5 males (0.47%) and 2 women (0.20%). The majority ACHD (n=1837) were younger than 40 years (90%). Female ACHD had more often the risk factors: arrhythmia history (n=236 women, n=201 male, p<0.05), higher degree of heart failure, by NYHA>1 (n=453, n=285 men, p<0.05), which require more often of medications (n=660, n=466, p<0.05). Men smoked more often (n=169, n=29, p<0.05). Obesity, infective endocarditis had no significant differences depend on sex. Woman had prevalence in ASD (n=286), VSD (n=169), PDA (n=106), men (n=145, n=129, n=51, respectively, p<0.05). Men had prevalence in congenital aortic valve malformations (n=318) and CoAo (n=106), women (n=107, n=59, respectively, p<0.05). In Gr.1 women more often required cardiac surgery procedures at ASD (n=90; 47%), and PAPVC (n=14; 52%), males (n=30; 33%, n=8; 25% respectively, p<0.05). The men in the same group in ToF (n=15; 32%), women (n=3, 9%).

Conclusions:
The age peculiarities for ACHD were prevalence patients younger than 40 years old, with no significant gender differences. Woman had significantly more often arrhythmia history, higher degree of heart failure, more medications, prevalence in ASD, VSD, PDA, and more often required surgical/percutaneous intervention in ASD and PAPVC. Men smoked more often, had significantly prevalence in congenital aortic valve malformations and CoAo, more often required procedures in ToF.