IMPROVING FATE OF CHILDREN WITH DOWN SYNDROME AND CONGENITAL HEART DISEASE

M.E. Weijerman, R.J. Colenbrander, M.L. Hendriks, M.A. Sobotka-Plojhar Pediatrics VUMC, Amsterdam, The Netherlands weijerman@vumc.nl

Congenital heart disease(CHD)is present in 50% of children with Down syndrome(DS). The aim of the study was to analyze development in diagnostic approach, morbidity and mortality in a 10-year-period.

Retrospectively the data of all children with DS and CHD were analysed for cardiac defect,age at surgery,mortality,residual lesions and growth.

There were 97 patients seen with DS and CHD between 1991-2001, distributed into three groups:1991-1993(I,n=35),1994-1997(II,n=37) and 1998-2001(III,n=25). The heart defects were ASD(49%), VSD(34%), complete(30%) and incomplete(14%) AVSD. The main age of diagnosing CHD was in I 196, II 24 and III 30 days. Patients scheduled for surgery were: I 40%, II 57%, III 56%. Age at surgery decreased with time: I 582, II 284, III 102 days. Mortality before surgery reached: I 75%, II 20%, and III 0%. After operation I 4, II 5, and III 1 patients died respectively. Residual cardiac lesions after operation were: VSD(I 57%, II 48%, III 43%), MI(I 64%, II 57%, III 29%), TI(I 14%, II 24%, III 36%). Growth shift from p10 to >p10(Downcurve) after operation was in I 36%, II 36% and III 83%.

Conclusion: Within a 10-year-period a changing pattern of care for children with DS and CHD was documented. In recent period CHD is being diagnosed and operated earlier than before resulting in decreased mortality and morbidity.