Extracardiac or chromosomal anomalies strongly influence parental treatment decision and postnatal survival of neonates with prenatally diagnosed congenital heart diseases.

Bensemlali M., Bajolle F., Parisot P., Fermont L., Le Bidois J., Laux D., Salomon L., Bonnet D. M3C-Necker Enfants malades, AP-HP, Université Paris Descartes, Paris, France

Objectives: This study was design to assess the influence of extracardiac or chromosomal anomalies on parental decision of termination of pregnancy and on survival rates in newborns with prenatally diagnosed congenital heart diseases.

Methods and results: 2057 consecutive foetuses with congenital heart disease diagnosed from January 2002 to December 2011 were included: 1258 (61%) in-born neonates and 799 (39%) terminations of pregnancy (TOP). The overall prevalence of major extracardiac or chromosomal anomalies was 18.6%. Of the 1258 newborns, 121 had a major associated anomaly but only 55 were identified before birth. Prenatally identified associated anomalies were significantly lower in the newborn group in comparison with the TOP group (4% vs 31%, p<0.0001). They were also lower in the surviving group at one year of follow up (7.5% vs 20.7%, p<0.0001). A 4-fold increase of death rate was observed if an associated anomaly was identified (IC95%[2.5-6.7], p<0.0001). These associations remained significant after multiple logistic regression analysis including the severity of the heart defect (univentricular or biventricular physiology).

Conclusion: Women are more likely to terminate pregnancy if extracardiac or chromosomal anomalies are associated. Post natal survival is strongly influenced by these associated anomalies.