SURVEY OF CONGENITAL DIAPHRAGMATIC HERNIA (2006 -2009)

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Aim: To analyze the outcome of fetuses and neonates with congenital diaphragmatic hernia(CDH).

Methods: All fetuses and neonates diagnosed with CDH were obtained from CAROBB(Congenital anomalies register for Oxfordshire, Buckinghamshire and Berkshire, Jan 2006 - Dec 2009), SEND(South East Neonatal Database) and PICU(Paediatric Intensive Care Unit) admissions(Aug 2006 - Dec 2009). The foetal and neonatal outcomes were analyzed.

Results: 51 were identified from CAROBB database(pre & postnatal diagnoses). 29(75%) were born alive, 14(27%) terminated after prenatal diagnosis(5 isolated CDH and 6 chromosomal abnormalities), 2 stillbirths(24 & 33 weeks) and 1 spontaneous abortion(23 weeks). 5 patients' details were unknown. Among 29 livebirths, 22(76%) survived, 6(21%)died before surgery(4h to 4days) and 1 died at 7 months(surgery at 3days).

20 case notes with CDH were reviewed from SEND and PICU admissions. 13(65%) were antenatally diagnosed(AND) and 7(35%) diagnosed postnatally. In the AND group 8(62%) survived. Among 5 deaths, one was a 25 weeker, 3 had liver in the chest(2 preterm) and the last died(34 weeks) due to antenatally inserted tracheal balloon being too far down the bronchus to be deflated. All survived in the post natal diagnosis group. The AND group needed higher inspiratory pressures compared to postnatal diagnosis group(20-26 vs 17-24), delayed surgery(D3-8 vs D1-2) and prolonged postoperative ventilation(5-19 vs 1-3 days).

Conclusion: Overall survival for prenatally diagnosed CDH is 62% if survive to be born alive. Our data supports the previous data that prematurity and liver in the chest are poor prognostic signs. Postnatal diagnosis has a better outcome.