

Congenital Diaphragmatic Hernia: Improved Surgical Results Should Influence Abortion Decision Making.

Dr. Tomas Gudbjartsson, CZ Topan, LT Larsson, A Gunnarsdottir, Th Rosmundsson, A Dagbjartsson. Reykjavik, Iceland

Objectives: Congenital diaphragmatic hernia (CDH) is a rare anomaly (1/3000 of live births) where abdominal organs can enter the thoracic cavity, often resulting in pulmonary hypoplasia and pulmonary hypertension causing life threatening condition. Today CDH is increasingly detected prenatally, but due to previous reports with high operative mortality after corrective surgery (40-60%), many pregnancies are terminated. The aim of this study was to compare surgical results in two different university hospitals. Also to evaluate the effects of abortions on the clinical profile of CDH in Iceland.

Material and methods: A retrospective study including all children diagnosed with CDH in Iceland between 1983 and 2002. Aborted fetuses diagnosed with CDH after 1993 from a nation-wide Icelandic abort-registry were also included. For comparison all patients with CDH referred to Lund University Hospital 1993-2002 were studied.

Results: In Iceland, 16 children were born with CDH during the study period, with 12 early presenters (diagnosed within 24 hours from delivery), one of them with an associated congenital anomaly (8%). Seven fetuses were diagnosed with CDH prenatally and aborted. Four of the aborted fetuses had isolated CDH at autopsy. The number of liveborn neonates with CDH during the same 10-year period was 7, compared to 9 cases from 1983-1992. In Iceland all children survived surgery (100% 3-year survival). In Lund 28 children were treated with surgery, 24 early presenters or prenatally diagnosed. Four children did not survive surgery (83% 3-year survival). Nine children (38%) had associated congenital anomalies. All the children that were discharged from the hospital in both Iceland and Lund are alive, 3-12 years postoperatively.

Conclusion: In Iceland, every other pregnancy complicated with CDH is terminated. This has resulted in fewer children born with CDH and a low rate of associated congenital anomalies. This patient selection could be one of the explanations for the excellent survival rate after corrective surgery in Iceland. However, survival is also high (83%) in Lund, representing a more unselected group of CDH patients (38% associated anomalies). Most of these children seem to well later in life. A prenatal diagnosis of isolated CDH must therefore be regarded as a doubtful indication for abortion.