





## CDH 22-Glasgow-Quoi de neuf en prenatal?

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for rare or low prevalence complex diseases

#### Network

Inherited and Congenital Anomalies (ERNICA)



Session 3: Co-chairs: Prof Alexandra Benachi
The Fetus with CDH: Assessment and management Dr Anthony Johnson

Old and new predictors of outcome in CDH	Dr Tim Jancelewicz
FETO and the TOTAL Trial, what have we learnt?	Prof Jan Deprest
Implementing FETO - what you need to know	Prof Alexandra Benachi
Oral abstract presentations	
Prenatal Brain Maturation in Neonates with Congenital Diaphragmatic Hernia (CDH)	Sandy Johng
Fetoscopic Endoluminal Tracheal Occlusion Balloon Related Complications	David Basurto
Ultrasound prediction of survival in CDH: validation of the current algorithm in the TOTAL trial population	Dr Francesca Russo
A core outcome set for perinatal interventions for congenital diaphragmatic hernia	Dr. Simen Vergote

- Discussion avec les US sur la reproductibilité des TOTAL trials chez eux
- Cerveau et HCD

	CDH	Controls	р
Transverse cerebellar diameter (mm)	39 (24-51)	41 (30-49)	0.1533
Anteroposterior vermis length (mm)	13 (9-17)	13 (9-16)	0.3214
Craniocaudal vermis length (mm)	18 (13-25)	19 (13-23)	0.7155
Parietoccipital fissure depth/BPD	0.09 (0.07-0.13)	0.09 (0.05-0.15)	0.6492
Lateral fissure depth/BPD	0.16 (0.13-0.21)	0.16 (0.12-0.19)	0.5901
Cingular fissure depth/BPD	0.06 (0.03-0.10)	0.04 (0.03-0.09)	< 0.000
Insular depth/BPD	0.27 (0.24-0.33)	0.28 (0.23-0.33)	0.0149

# Prenatal Brain Maturation in Neonates with Congenital Diaphragmatic Hernia (CDH)

<u>Sandy Johng</u><sup>1</sup>, Daniel Licht<sup>1</sup>, Holly Hedrick<sup>1</sup>, Natalie Rintoul<sup>1</sup>, Rebecca Linn<sup>1</sup>, Rui Xiao<sup>2</sup>, Shavonne Massey<sup>1</sup>

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CDH placentas had a higher proportion of fetal vascular malperfusion (56%) compared with historical controls (7-20%).

Conclusions: Prenatal brain maturation in CDH infants is delayed after 30 weeks' gestation, potentially due to placental pathology given a high proportion of fetal vascular malperfusion. The impact of prenatal brain immaturity needs further investigation, starting with reporting neurodevelopmental outcomes in our cohort. It is crucial to understand how placental pathology influences neurodevelopment, and investigate potential modifiable factors that could improve prenatal health in the CDH population

# LUNG RESPONSE AFTER FETOSCOPIC ENDOLUMINAL TRACHEAL OCCLUSION IN RIGHT-SIDED AND LEFT-SIDED CONGENITAL DIAPHRAGMATIC HERNIA

<u>Dr. Kanokwaroon Watananirun<sup>1,4</sup></u>, Dr. David BASURTO<sup>1</sup>, Dr. Francesca Maria RUSSO<sup>1,2</sup>, Dr. Lennart Van der Veeken<sup>1,2</sup>, Professor Luc DE CATTE<sup>1,2</sup>, Professor Liesbeth LEWI<sup>1,2</sup>, Professor Roland DEVLIEGER<sup>1,2</sup>, Professor Jan DEPREST<sup>1,2,3</sup>

### **Conclusions:**

The percentage of lung response at 2 weeks and 3 weeks after FETO are affected by o/e LHR at FETO and GA at FETO. In addition, the hernia side only had a significant effect on %LR at 2 weeks after FETO. The %LR does not predict survival at any time point.