Role of predictive mortality calculator in antenatal assessment of congenital diaphragmatic hernia

ABSTRACT

Congenital diaphragmatic hernia (CDH) is one of the most common major congenital anomalies. In utero visceral organ herniation into the thoracic cavity can result in lung hypoplasia and pulmonary hypertension may ensue. Post-natal mortality rates in isolated CDH remain high reaching up to 80% in severe cases. Several prenatal predictors of morbidity and mortality have been proposed. Reliable predictive markers can aid clinicians in providing effective family counselling, prediction of survival, and propose therapeutic options. Decreased total fetal lung volume (TFLV) via magnetic resonance imaging (MRI) has been reported to be significantly associated with mortality. We report on 2 cases of CDH, with fetal MRI performed at third trimester, focusing on the TFLV and observed-to-expected TFLV. We would like to highlight the importance of predictive mortality calculator which provides statistical data for healthcare providers in counselling families and aids in risk-stratification.

Keyword: Total fetal lung volume (TFLV); Congenital diaphragmatic hernia; Fetal MRI