

Diagnosis of fetal growth restriction in Fetuses with Congenital Diaphragmatic Hernia

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Objectives: to assess the performance of 3 ultrasound-based EFW formulas in predicting small-for-gestational-age (SGA) neonates

Methods:

- Retrospective review of patients with CDH between 2014 and 2024.
- Major associated anomalies excluded
- ROC curve analyses were performed using EFW percentile scores at the last available third trimester ultrasound, derived from three formulas (Hadlock, Honarvar, and Siemer)
- 1ary outcome: SGA at birth
- for each formula, the area under the curve (AUC), optimal cut point, sensitivity, and specificity were calculated.

Results:

- 373 fetuses with CDH were included
- Twenty-eight newborns (7.5%) were SGA

	AUC	St. error	95% CI
Hadlock	0.9475	0.0186	0.91105-0.98388
Siemer	0.8229	0.0382	0.74799-0.89777
Honarvar	0.7768	0.0424	0.69368-0.85984

Conclusions:

- the **Hadlock** formula demonstrated the **best performance** for prediction of SGA, with excellent discrimination and high specificity.
- The **optimal cut off for EFW to predict SGA at birth is 9.5%.**

