

EP 10.18 Clinical impact of the increment in lung size after pleuro-amniotic shunt in fetuses with severe hydrothorax.

Cisneros-Martínez A, Sánchez-Martínez F, Rojas-Pillaca R, Peláez-Jiménez A, Cruz-Martínez R.

Objective:

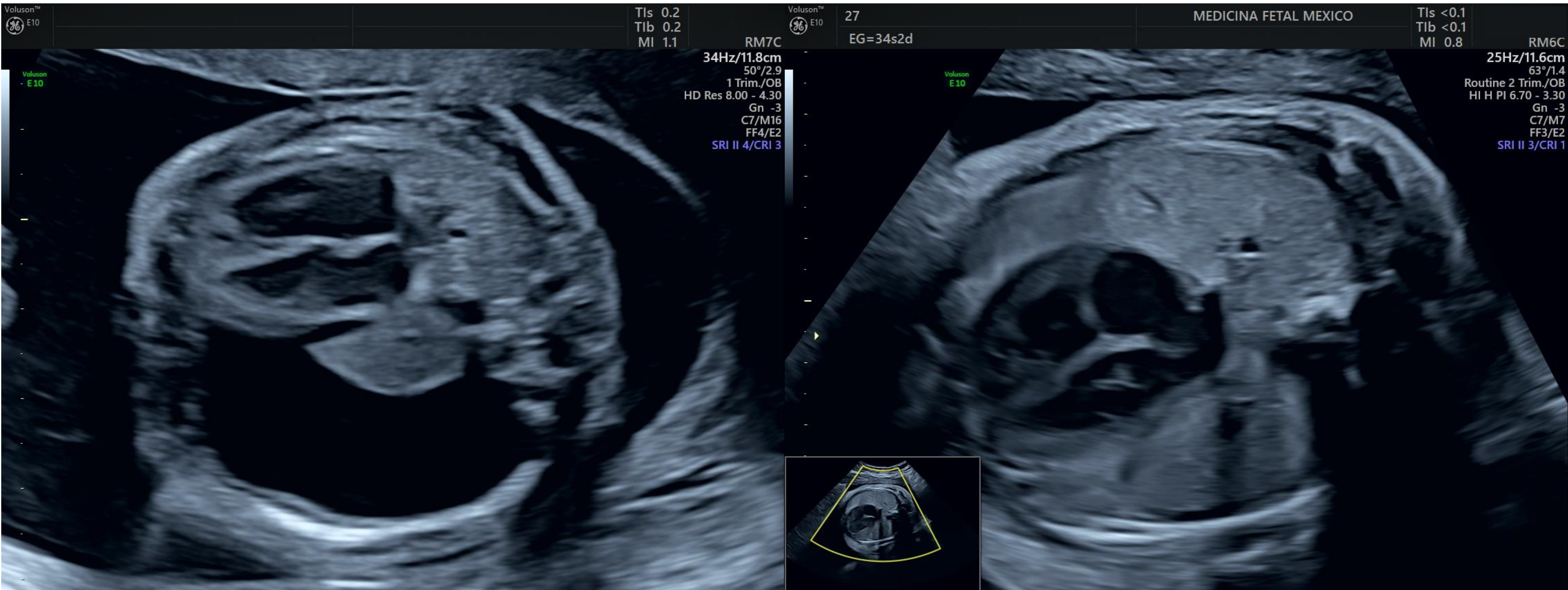
To evaluate the impact of the lung growth pleuro-amniotic shunt (PAS) in predicting survival in fetal hydrothorax.

Method:

A cohort of fetuses with hydrothorax treated with PAS were recruited. The observed/expected lung-to-head circumference ratio (O/E-LHR) were evaluated before and every week after fetal intervention.

Results:

52 fetuses were successfully treated with PAS at a mean GA of 30.1 weeks. Neonatal survival was 63.5%. The O/E-LHR significantly increased after PAS (83.1% vs. 47.2%, $p<0.001$). Survivors showed a significantly higher GA at birth (36.6 vs. 33.9, $p<0.001$) and higher posoperative lung size (88.0% vs. 74.6%, $p<0.01$) than non-survivors. Decision tree analysis identified 3 groups: GA at birth <34 weeks: 25% survival; GA at birth >34 weeks and O/E-LHR $<70\%$: 16.7% survival, GA at birth >34 weeks and O/E-LHR $>70\%$ 85.3% survival.



Conclusions:

The lung growth after pleuro-amniotic shunt and gestational age at birth are good independent predictors for survival in fetuses with severe hydrothorax.