

Collaborative trial of prenatal thyrotropin-releasing hormone and corticosteroids for prevention of respiratory distress syndrome

Torres,

Salinas,

Maturana,

Rubio,

Gonzalez,

Cox,

Biotti,

D'Apremont,

Gonzales,

Rubio,

Rios,

Balboa,

Sfeir,

Roman,

Echeverria,

Herrmann,

Llanos,

Morgado,

Moya,

OBJECTIVE: Our purpose was to determine whether adding antenatal thyrotropin-releasing hormone to prenatal corticosteroids reduces the frequency of respiratory distress syndrome. **STUDY DESIGN:** A randomized, multicenter, double-blind, placebo-controlled trial was conducted of thyrotropin-releasing hormone (400 µg intravenously every 8 hours four times) in women with singleton pregnancies <33 weeks of gestation who received antenatal betamethasone (12 mg

intramuscularly every 24 hours two times). Neonates weighing <1.0 kg received prophylactic surfactant and those above that weight received rescue therapy. RESULTS: One hundred ninety women received thyrotropin-releasing hormone and 180 were given placebo. There were no differences in the frequency of respiratory distress syndrome (relative risk 1.17 [95% confidence interval 0.93 to 1.48]), use of oxygen at age 28 days (1.14 [0.80 to 1.62]), or neonatal mortality (1.05 [0.79 to 1.38]). Air leaks were more frequent in the thyrotropin-relea