

# Thymus Size and its Relationship to Perinatal Events

許薰惠

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摘要

## **Abstract**

A retrospective study was conducted to assess radiographically the thymus size in well and sick neonates and to search for a possible relationship to perinatal events. Thymus size was expressed as cardiothymic:thoracic ratio (CT/T) by measuring the width of the cardiothymic shadow at the level of carina and dividing it by the width of the thorax at the costophrenic angles. The CT/T was measured on chest radiographs obtained on day 1 in well term neonates consecutively born in our nursery and sick neonates with meconium staining of the amniotic fluid, meconium aspiration syndrome or respiratory distress syndrome (RDS). Neonates with congenital anomalies, congenital heart disease or intrauterine growth retardation were excluded. There were no significant relationships between CT/T and sex, birth route, birthweight or gestational age in well and sick term neonates. The CT/T were comparable among well and sick term neonates and were significantly greater in the preterm neonates with RDS than in the preterm neonates without RDS. The CT/T was correlated to the birth route only in the preterm neonates. We conclude that thymus involution in the perinatal period is a complex process and the response is different between term and preterm neonates.