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Obstetrics

NEONATAL RESPIRATORY DISTRESS The author proposes that hyaline membrane disease, hyaline membrane-like disease without membranes, lobar opacification, some cases of intra-alveolar pulmonary hemorrhage, and small areas of atelectasis in the lungs of newborn infants are all variants of one syndrome caused by aspiration of maternal blood in amniotic fluid during delivery. Although no evidence is presented, certain clinical observations, heretofore unexplained, appear to be accounted for by the theory: 1) In premature-twin delivery, the second twin is *in utero* longer than the first twin, has a greater chance to aspirate blood, and, in fact, does have a higher incidence of respiratory distress than the first twin. 2) In an isolated instance of a triplet delivery, the smallest twin, delivered with membranes around the head, had no respiratory distress; the next twin had slight respiratory distress; the last twin, the largest, had marked respiratory distress. This finding formed the basis for the report. 3) The peak incidence of respiratory distress in newborns occurs in infants with body weights between 1.0 and 1.5 kg, with gradual decreases in those lighter and those heavier. In the lighter group, most alveoli are needed to sustain life; if any alveoli malfunction because of aspiration of maternal blood, death occurs before respiratory distress can develop. Some infants in this group are too weak to aspirate during delivery; this also reduces the incidence of respiratory distress in this group. In the heavier, more mature group, there is greater pulmonary reserve, and the incidence of respiratory distress also decreases. (Pender, C. B.: *Respiratory Distress in Multiple Births and Premature Infants*, *Am. J. Obstet. Gynecol.* 112: 298-299, 1972.)