Management of the Late Preterm Infant

Not Quite Ready for Prime Time

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KEYWORDS

• Late preterm • Near term • Respiratory immaturity • Feeding difficulties
• Hypoglycemia • Body temperature regulation

KEY POINTS

- Appropriate resources and personnel should be available to manage the late preterm infant.
- Late preterm infants are increasingly at risk for disorders of prematurity with decreasing gestational age.
- Parents, staff, and providers need to be aware that feeding problems are common and related to immaturity and gestational age.

DEFINITION

Late preterm or early term infants are those that are born between 34 0/7 to 36 6/7 weeks of gestation. The now accepted term is late preterm infant and is the result of a consensus workshop convened by the National Institute of Health in 2005.[1] This definition better reflects the problems and outcomes of infants born prior to term compared with the term infant.

EPIDEMIOLOGY

There has been a steady increase in the rate of preterm births in the United States over the last several decades. Preterm births account for approximately 12.5% of all births, and late preterm births account for 72% of the preterm births (**Fig. 1**).[2] This problem is not limited to the United States alone; emerging data suggest that the rate and number of preterm births are increasing in all races and in countries around the world.[3]

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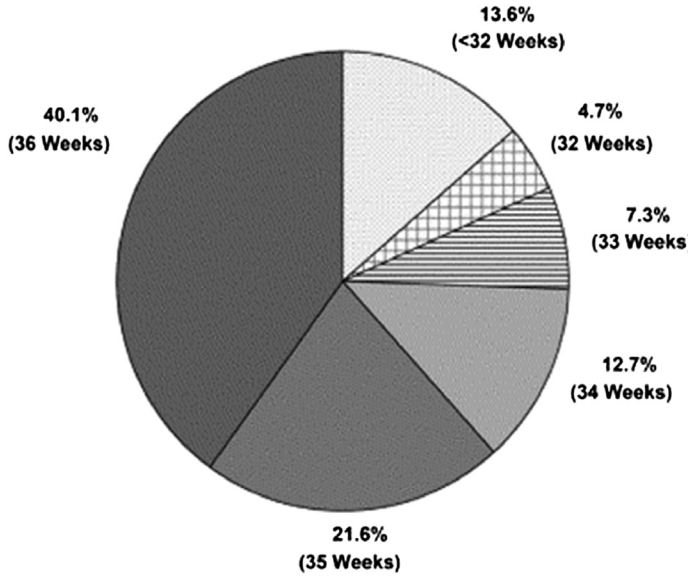

Fig. 1. Gestational age distribution of singleton premature births in the United States 2002. (*From* Davidoff MJ, Dias T, Damus K, et al. Changes in the gestational age distribution among U.S. singleton births: impact on rates of late preterm birth, 1992 to 2002. Semin Perinatol 2006;30(1):8–15; with permission.)

The reason for the increase in late preterm births is not clearly understood; however, several causes have been theorized. These include better risk assessment of maternal/fetal disorders, increase in elective inductions, increased elective caesarian sections, increasing maternal age, and increasing rates of multiple gestations (**Figs. 2** and **3**).[4] The increase in inductions and caesarean sections has been described as a significant factor in the downward shift in gestational age at birth. As a result, both the American Congress of Obstetricians and Gynecologists (ACOG) and the March of Dimes have begun campaigns to raise awareness in both patients and providers on the importance preventing nonindicated preterm deliveries ("No infant before 39 weeks and Healthy babies are worth the wait").[5] This effort appears to have stopped the increase in late preterm births and brought the late preterm birth percentage of all births back to 2003 levels (**Fig. 4**).

Multiple gestations have elevated the rates of late preterm births compared with singletons (**Fig. 5**). The increase in multiples is believed to be related to the delay in first pregnancies and the increased use of assisted reproductive technologies (ARTs).[6] The contribution of ART to multiples is approximately 50%, but the effect on national preterm birth rates is more limited.[6]

Maternal age plays a significant role in late preterm births, with the highest rates in women younger than 20 and older than 35 years of age (see **Fig. 3**). Maternal comorbidities are also age related, with hypertension, diabetes, and use of or need for ART being associated with advanced maternal age, and lower socioeconomic status and behavioral risk factors higher in the younger women.[4]