OVERVIEW OF THE LATE PRETERM INFANT

If you are reading this chapter, you may be anticipating the birth of a late preterm infant or may have just given birth to a late preterm baby. Perhaps you are interested in this book because you know someone who is having this experience. We'd like to start off by offering you our congratulations! We hope that this book will help you to navigate this experience.

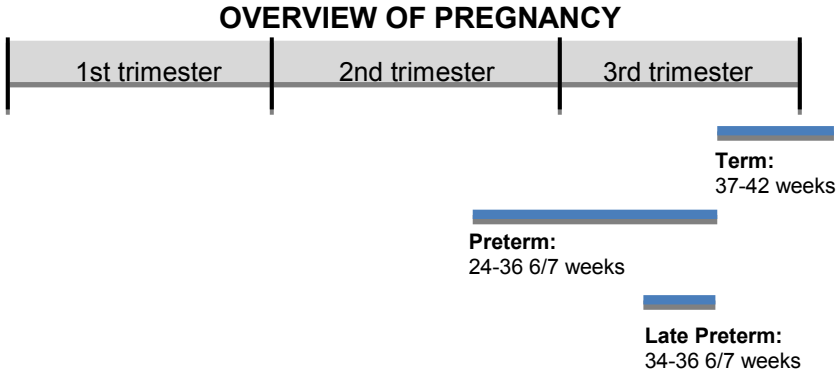
After working with late preterm infants for many years, we realized how little information on this topic is available to families of late preterm infants. The books about preterm infants that are currently available are focused on preterm infants that are born months earlier. These infants have very different needs in the hospital and beyond. In this book, we focus only on late preterm infants, providing information that is relevant to this population. Throughout this book, we will define common medical issues that may occur in late preterm infants. The first time a medical term is described, the words will be in italics. These italicized terms are summarized in the Dictionary in the last chapter of the book. We have also provided a weight conversion chart in the back of the book to help you convert grams to pounds.

Definition of a Late Preterm Infant

A *term infant* is defined as a baby who is born between 37 weeks' gestation and 42 weeks' gestation. The due date [sometimes called

This is an excerpt from: Brodsky D, Quinn M. *A Parent's Guide to the Late Preterm Infant*. Lulu. 2014.

the Estimated Date of Confinement (EDC) or Estimated Date of Delivery (EDD)] is the date that a baby reaches 40 weeks' gestation. A *preterm infant* is any baby born less than 37 weeks' gestation. Most preterm infants are born just a few weeks early, between 34 weeks' gestation to 37 weeks' gestation. These infants had previously been described as near-term infants because they were born so close to term. However, medical experience has shown that preterm infants born just a few weeks early often behave more like a preterm infant than a term infant. Thus, the phrase *late preterm infant* is now used to describe infants born between the beginning of the 34th week of gestation to the end of the 36th week of gestation. A timeline of pregnancy is shown in the Figure below.



Statistics about Late Preterm Infants

Preterm births account for approximately 11% of all births in the United States. Thus, for every 100 infants born in this country, about 11 infants are born premature. Most of these early deliveries are late preterm births with approximately 310,000 late preterm

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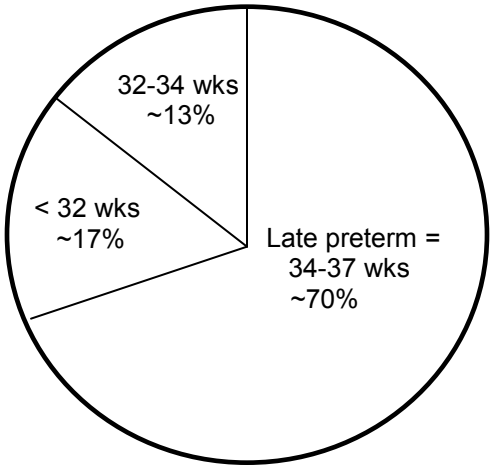
infants born every year in the United States. The graph on the next page shows the large percentage of late preterm births that occur in the United States.

Percent Distribution of all Preterm Births



Causes of Late Preterm Birth

There are many different reasons why a baby is born early. An infant may need to be delivered because of medical concerns in the mother, such as extremely high blood pressures or vaginal bleeding. A delivery might occur early if the fetus is not growing well or has a medical concern. Women with early uterine contractions will have a preterm birth if:

- The labor cannot be stopped,
- There is concern for infection, or
- The fetus is not tolerating labor, which may be evident by a decrease in the fetal heart rate.

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Sometimes, the uterine environment is not ideal for the fetus. For example, the amniotic fluid can begin to leak because the amniotic sac breaks before labor begins (known as *premature rupture of membranes*). If this is associated with signs of an infection in the mother or fetus, the infant will need to be delivered early. If there are multiple fetuses, such as twins or triplets, preterm labor is common, likely because of the increased stretching of the uterus.
The early birth of an infant is sometimes planned ahead of time. In other cases, a preterm birth may not be expected and occurs suddenly, often causing parents to feel overwhelmed. Doctors and nurses in the hospital will meet with families either before the preterm birth, or soon after, to guide families about what to expect.

Regardless of the circumstances leading to a preterm birth, it is important that parents realize that there is nothing that a mother or father did to cause the preterm delivery and nothing that could have been done to prevent it. Unfortunately, the cause of the majority of preterm births is not known. Research studies are currently underway to better understand preterm labor so that we can develop approaches to prevent preterm births.

Appearance of Late Preterm Infants

The physical appearance of late preterm infants is very similar to term infants. However, there are a few differences. Late preterm infants are smaller in size than term infants. Because the fetus gains fat in the last part of the pregnancy, late preterm infants typically have less fat on their bodies. As a result, the blood vessels over a baby's chest or abdomen might be more visible, as shown below.

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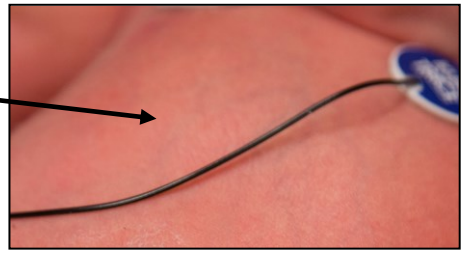
Blood vessels visible on a late preterm infant's chest



Late preterm infants also have fewer creases on the soles of their feet and might have a larger amount of soft hair on their bodies compared with term infants. With time, late preterm infants will appear similar to term infants.

Possible Medical Issues in Late Preterm Infants

Some late preterm infants may act mature immediately after they are born, while others behave immaturely and require extra medical care until they become mature. Parents of late preterm infants are often surprised, and sometimes frightened, that their baby may require a longer time in the hospital. However, closer observation in the hospital is actually quite common and regardless of how much extra support or time is needed, the medical issues are usually short-lived. Indeed, most late preterm infants are ready to go home around their due date.

Clinicians cannot predict which late preterm infants will require additional medical attention. In general, infants with an earlier gestational age have a greater risk of requiring a stay in the Special Care Nursery (SCN) or Neonatal Intensive Care Unit (NICU). Thus, a baby born at 34 weeks' gestation is more likely than a baby born at 36 weeks' gestation to require intensive care. For those

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infants who require extra support, providers cannot anticipate the time period that it will take for the infant to reach maturation. These uncertainties may bring additional stress to parents of late preterm infants.

Fortunately, late preterm infants usually have only a few medical issues. In contrast to preterm infants born less than 34 weeks' gestation, most late preterm infants are past the point of severe complications of prematurity, such as immature retinal blood vessels, bleeding inside the ventricles of the brain, severe infection of the intestines, and severe lung injury. The most common medical issues that can occur in this late preterm infant population are:

1. Breathing difficulties,
2. Feeding difficulties,
3. Inability to maintain a normal temperature, and
4. Jaundice.

Explanations of each of these potential concerns is provided in this book, along with pictures, to help families prepare for these possibilities and have a better understanding of the medical needs of their infants.

Emotions of Parents of Late Preterm Infants

Many parents of a late preterm infant encounter a range of emotions. Some people might be excited to have made it this far in the pregnancy while others may be saddened because they had anticipated having a baby born at full-term. Although the birth of a late preterm baby is not caused by something that a mother or father did or didn't do and is not something that can be prevented,

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parents of late preterm infants sometimes have a sense of guilt. Still others may feel angry at having a late preterm infant. Families may have different emotions at various moments of the day. All of these responses are normal reactions as parents maneuver through an unexpected and unfamiliar situation. The clinicians caring for your baby will provide you with a lot of support during this time.

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