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Use of Language

ACOG recognizes and supports the gender diversity of all patients who seek obstetric and gynecologic care. In original portions of this document, the authors seek to use gender-inclusive language or gender-neutral language. When describing research findings, this document uses gender terminology reported by the investigators. ACOG's policy on inclusive language can be reviewed at <https://www.acog.org/clinical-information/policy-and-position-statements/statements-of-policy/2022/inclusive-language>.

CLINICAL OVERVIEW

Evidence-based labor management is a crucial step in the efforts to achieve safe vaginal delivery, because labor arrest is the most common indication for cesarean delivery in the United States, accounting for approximately one-third of all cesarean deliveries (11). Ideal labor-management strategies should optimize the likelihood of vaginal delivery and minimize both maternal and neonatal morbidity while also addressing patient preferences and values through a shared decision-making process.

CLINICAL RECOMMENDATIONS AND EVIDENCE SUMMARY

Labor and Labor Arrest Definitions

Normal Labor

The *onset of labor* traditionally is defined as the presence of regular and painful uterine contractions resulting in cervical dilation or effacement or both. However, there is heterogeneity in how labor onset is defined in the literature; retrospective studies often use hospital admission or initial cervical examination as the starting point, which may underestimate the duration of early labor (12).

The *first stage of labor* is defined as the interval between the onset of labor and complete or 10 cm cervical dilation. The first stage is further divided into two phases: latent and active. The *latent phase of labor* is characterized by gradual and relatively slower cervical dilation that starts on perception of regular uterine contractions and ends when rapid cervical change initiates. This phase of rapid cervical change is termed the *active phase of labor* and continues until complete cervical dilation. The *second stage of labor* commences at 10 cm cervical dilation and ends on delivery of the neonate. The *third stage of labor* is the period between delivery of the neonate and delivery of the placenta.

Friedman Compared With Zhang Labor Curves

In the 1950s, Dr. Emanuel Friedman pioneered one of the first objective and graphical descriptions of labor progression (13, 14). By creating cervical dilation time graphs in at-term patients admitted in spontaneous labor, Friedman and colleagues described a sigmoid pattern to labor progression, with distinct divisions of the first stage, including latent, active, and deceleration phases. Using these data, the 95th percentile of latent phase duration was 20 hours in nulliparous patients and 14 hours in multiparous patients (13–15). The transition from latent to active phase was thought to occur at approximately 4 cm cervical dilation. Friedman observed that the 95th percentile rate of active phase cervical dilation ranged from 1.2 cm/hour in nulliparous patients to 1.5 cm/hour in multiparous patients (13–15). The deceleration phase was thought to be a slower rate of cervical change proximal to the end of the first stage of labor.

The 2010 data published by Zhang et al from the Consortium on Safe Labor have been used to refine the definition of normal labor progress (16). In this retrospective study conducted at 19 hospitals in the United States, the duration of labor was analyzed in 62,415 parturients, each of whom delivered a singleton vertex neonate vaginally and had a normal perinatal outcome. In the Consortium on Safe Labor study, the latent phase of labor had a wide range of duration that was dependent on cervical examination at admission and parity, suggesting that a normal latent phase may have wide variation. Additionally, the 95th percentile rate of active-phase dilation was substantially slower than the standard rate derived from Friedman. From 4 cm to 6 cm, nulliparous and multiparous patients dilated at a similar rate. Beyond 6 cm, multiparous individuals dilated more rapidly than nulliparous individuals. The transition to the active phase of labor was achieved at 6 cm compared with the Friedman definition of 4 cm. The Consortium on Safe Labor data did not show a deceleration phase at the end of the first stage of labor. Table 1 summarizes differences between the Friedman and Zhang labor curves.

Since the publication of the Consortium on Safe Labor data, additional studies have demonstrated that labor curves may be affected by maternal obesity, maternal hypertension, age, induction of labor, gestational age, multiple gestations, presence of fetal anomalies, fetal size, and fetal sex (17–25).

Latent Labor

The normal latent phase of labor varies widely among individuals, regardless of parity. Labor may take more than 6 hours to progress from 4 cm to 5 cm of dilation and more than 3 hours to progress from 5 cm to 6 cm of dilation (26). Using Consortium on Safe Labor

