

## LABOR-NORMAL AND ABNORMAL

Labor is the presence of uterine contractions of sufficient intensity, frequency, and duration to bring about effacement and dilatation of the cervix.

Stage 1: Onset of labor until full dilation (10 cm)

- Latent phase-onset of labor until active labor
- Active phase-most rapid changes in cervical dilation  
-usually around 4 cm

Stage 2: Complete dilation until delivery of baby

Stage 3: Delivery of baby until placenta delivered (up to 30 minutes is normal)

Dystocia is defined as difficult labor or childbirth, or abnormal labor.

- Leading indication for primary cesarean delivery in the United States
- Can be thought about as abnormalities of the:
  - Power (uterine contractions or maternal expulsive forces)
  - Passenger (position, size, or presentation of the fetus)
  - Passage (pelvis or soft tissues)
- Labor abnormalities (dysfunctional labor) are best classified as either:
  - Slower-than-normal, or protraction disorders, or
  - Complete cessation of progress, or arrest disorders

### Abnormal Labor Patterns and Diagnostic Criteria

Labor Pattern	Primip	Multip
Protraction Disorders		
Dilation	< 1.2 cm/h	< 1.5 cm/h
Descent	< 1.0 cm/h	< 2.0 cm/h
Arrest Disorders		
Dilation	> 2 h	> 2 h
Descent	> 1 h	> 1 h

Oxytocin administration (labor augmentation) should be considered when a patient has a protraction or arrest disorder.

Amniotomy may also be helpful.

Before an arrest disorder can be diagnosed in the first stage of labor, the following two criteria should be met:

- 1.) The latent phase is completed, and
- 2.) A uterine contraction pattern exceeds 200 Montevideo units for 2 hours without cervical change.

The “2-hour rule” for the diagnosis of arrest in active labor has recently been challenged. One study demonstrated that with using 4 hours of a sustained uterine contraction pattern of greater than 200 Montevideo units, or a minimum of 6 hours of oxytocin augmentation if the contraction pattern could not be achieved, 92% resulted in vaginal delivery.

Thus, extending the minimum period of oxytocin augmentation for active-phase arrest from 2 to 4 hours appears effective.

#### **Prolonged Second Stage of Labor**

<b>Primip</b>	> 2 h	> 3h with epidural
<b>Multip</b>	> 1 h	> 2 h with epidural

Can use pitocin augmentation during second stage if needed.

References: ACOG Practice Bulletin, No. 49, December 2003.