

Variable Decelerations

A variable deceleration is characterized by an abrupt decrease in FHR below the baseline with the onset to lowest point (nadir) less than 30 seconds. They can occur any time during the contraction cycle and last at least 15 seconds. They happen in approximately half of all labors and are usually transient and correctable. They have a characteristic U, V, or W shape on the fetal monitor and are noted by their rapid descent and ascent from the lowest point (nadir) of the deceleration.



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Mechanism

Umbilical Cord Compression

[Umbilical Cord Compressed](#)

Variable decelerations can occur at any time during uterine contractions and are caused by compression of the umbilical cord.

Occurs During

Abnormal Cord Position

[Tangled in Umbilical Cord](#)

The umbilical cord can be wrapped around the fetal neck, chest, arm, or leg. When the cord is between the fetus and maternal pelvis, it can lead to compression. Also, a short cord, knot in the cord, or a prolapsed cord can lead to variable decelerations.

Considerations

Transition Phase

[Transition to birth canal](#)

Variable decelerations commonly occur during the transition phase of labor as the fetus descends into the birth canal, which causes stretching of the umbilical cord and some compression.

Interventions

Oxygen with Non-Rebreather (8-10 L/min)

[O2-tank with Non-rebreather-mask](#)

It is important to provide oxygen by nonrebreather face mask to the mother to alleviate the shortage of oxygen exchanging across the placental to the fetus due to umbilical cord compression.

Change Maternal Position

[Mom Changing Positions](#)

Depending on where the cord is being compressed, it is helpful to move the laboring mother side to side or to place her in knee chest position for prolapsed cord.

Discontinue Oxytocin

Stopped Octopus-toe

Whenever there is a nonreassuring fetal heart rate and pattern, it is important to discontinue oxytocin (Pitocin), because it will stop the stimulation of the uterus and slow down the contractions.