

Fetal Scalp Electrode Placement

Guidelines for use and initiation of fetal scalp electrodes (FSE) to monitor fetal heart rates.

Purpose:

To obtain an accurate tracing of fetal heart rate, variability and periodic changes during labor. Only MDs, CNMs, and competency verified L&D RNs may perform insertion.

Warnings:

Because the tip of this electrode is designed to penetrate the fetal epidermis, the possibility of trauma, hemorrhage and infection exist. It should be used only under aseptic conditions.

Qualifying factors: Patient must have ruptured membranes.

Contraindications: The electrode should NOT be applied to a malpresentation, when placenta previa or excessive vaginal bleeding is present, when genital infections (e.g., herpes, Group B strep, gonorrhea) or blood borne diseases (e.g., Hepatitis B carrier, HIV carrier) exist, or when it is not possible to identify the fetal presenting part.

Procedure:

1. Assist the patient to the dorsal lithotomy position.
2. Use aseptic technique to unpack the electrode.
3. Remove the electrode wires from the locking slot on the drive tube grip by lifting the wires away from the slot. Straighten out the electrode wires. Be certain spiral electrode is retracted one inch within the guide tube.
4. Perform a vaginal exam and clearly identify the fetal presenting part. Place guide tube firmly against fetal presenting part; avoid the sutures on the fetal head.
5. Advance the drive tube and spiral electrode at a right angle until the electrode reaches the presenting part. Maintain pressure against the presenting part with the guide and drive tube. Holding the drive tube grip between thumb and forefinger, rotate the drive tube clockwise until mild resistance is met.
6. **Important:** Secure attachment is indicated by resistance to further rotation and recoil of the drive tube grip.
7. Verify that electrode wires have been straightened to facilitate guide and drive tube removal.
8. Carefully slide the drive and guide tubes off the electrode wires over the attachment end.

Reference:

1. AWHONN, Fetal Heart Monitoring: Principles & Practice 3rd ed., Kendall/Hunt Publishing, 2003
2. Instruction literature Corometrics

Reviewed: Jun 2012, Jul 2015

Revised: Jun 2012