

Basic Skills Qualification Fetal Scalp Electrode (FSE) Placement

Evaluation Process

Prior to seeking BSQ certification, a resident should be confident in their skills. The "Basic Skills Qualification" is printed and given to the supervising physician, where after, the resident performs the procedure under direct observation of the supervising physician. The competency assessment is completed by the supervising physician with their signature and given back to the resident. The resident then returns the competency assessment to the Academic Coordinator.

Resident: _____

	Competent	Needs Work
Described two relative contraindications and two potential risk of FSEs		
Explain to patient indication for FSE and placement		
Demonstrate all steps necessary in placing FSE		
Successfully places FSE		

Faculty: _____

Date: _____

Description: Internal fetal scalp electrode monitoring involves placing an electrode directly on the fetal scalp through the cervix. This test is performed to evaluate fetal heart rate and variability between beats, especially in relation to the uterine contractions of labor.

Prerequisites:

1. Fetal membranes are ruptured
2. Cervical is sufficiently dilated, at least 1-2 cm

Indications:

1. External monitoring is unable to be used (e.g. Maternal obesity)
2. Inability to obtain a continuous trace externally
3. The signal quality of external monitoring is poor
4. Confirm an abnormal fetal heart tracing

Contraindications:

1. Diagnosed or suspected previa, vasa previa, and uterine bleeding of undetermined origin
2. Infectious risks to fetus (i.e active maternal herpes, HIV)

Materials:

1. Sterile gloves
2. FSE device

Preprocedure Education:

1. Explain indication for FSE to patient
2. Explain procedure to patient
3. Obtain verbal consent

Procedure:

1. Using a sterile technique, remove the FSE from its package leaving the wires locked in the retention notch at the top of the FSE.
2. Insert the FSE until the presenting part is contacted and ensure the guide tube end is held flat against the presenting part.
3. Press firmly against scalp and twist 3 turns clockwise
4. Tug gently to ensure firm placement
5. Release the wire from the retention notch and removed guide tube
6. Attached to leg adapter
7. Ensure proper functioning
8. Document placement up FSE in the chart

Removing the FSE:

1. Grasp the electric wires as close as possible to the fetal presenting part, turning them counter clockwise until the spiral tip is free from the fetal skin. DO NOT pull the spiral tip from the fetal skin. DO NOT pull the FSE wires apart.
2. Inspect the spiral tip to ensure that it is still attached to the FSE hub

Complications:

1. Lacerate maternal vagina or cervix (inadvertent maternal application)
2. Increased risk of chorioamnionitis or endometritis
3. Lacerate fetal scalp or misplacement of fetal scalp electrode
4. Needle electrode can break with retention of portion of needle in fetal scalp
5. Small increased risk of neonatal infection