MATERNAL SERVICES

(Scope)

TITLE: FETAL ACOUSTIC STIMULATION TEST (F.A.S.T.)

PURPOSE: To define the procedure for use of the fetal acoustic stimulator.

LEVEL: Interdependent

SUPPORTIVE DATA:

1. Use of the fetal acoustic stimulator to assess fetal well-being is accepted clinical practice and does not require written or oral informed consent from the mother.

2. The fetal acoustic stimulator is used as an adjunct to both antepartum (non-stress testing) and intrapartum (with either external or internal FHR monitoring) assessment of fetal well-being.

3. EFM protocol and procedure.

4. Non-Stress Test Procedure

5. Fetal Acoustic Stimulation Test Procedure

EQUIPMENT LIST:

1. Non-stress test outpatient chart packet (outpatient testing).

2. Electronic fetal monitor equipped with acoustic stimulator connection port.

3. Fetal acoustic stimulator
CONTENT: PROCEDURE STEPS: KEY POINTS:

As Outpatient Test

1. Obtain order.

2. Explain to mother test procedure to be used, indication and rationale and expected results. Answer all questions to reduce anxiety.

3. Apply EFM per EFM and non-stress test procedures and protocols.

4. Monitor to establish FHR baseline for a minimum of 10 minutes. Evaluate for spontaneous FHR accelerations.
   
   NOTE: Notify medical provider if spontaneous reactive non-stress test results.

5. Connect Fetal Acoustic Stimulator to EFM.

6. Establish approximate location of the fetal head. Use Leopold's Maneuver.

7. Place acoustic stimulator on the maternal abdomen over the area of the fetal head gently but firmly.

8. Activate the device by depressing the button for one to two second interval. Monitor tracing will be noted automatically.

9. Wait 5 minutes, assessing for fetal response. Qualifying response per non-stress test criteria.

10. If no fetal response occurs, repeat steps 7-9 up to three times at 1-5 minute intervals.

11. Wait for a qualifying acceleration for up to 40 minutes after the last acoustic stimulus given - unless contraindicated.

   or

   If qualifying response occurs, continue to monitor for 15 minutes afterwards.


Procedure of Outpatient with Non-Reactive NST and Inpatient with Non-Reactive FHR Tracing -
This differs only in that EFM already established.

1. Notify medical provider of inability to obtain reactive tracing and

2. Obtain order for F.A.S.T.

3. Explain procedure to mother per above procedure.
4. Continue per above procedure Steps 5-12. 

NOTE: If the inability to obtain a reactive tracing becomes assessed as resulting (probable) from patient's lack of adequate nourishment prior to or during the monitoring period, adequate and appropriate nourishment should be provided as a first action before F.A.S.T. initiated.

DOCUMENTATION:
1. Document procedure and fetal reaction in CPN system.

2. Notes must include usual documentation per non-stress test procedure and EFM procedure and protocol - plus time of each stimulus, duration of each stimulus, fetal response, and nursing interventions, response, including medical provider notification and response of medical provider.

REFERENCES: Chez, Bonnie F., Carol J. Harvey, Michelle Murray; Fetal Acoustic Stimulation Test, Critical Concepts in Fetal Heart Rate Monitoring; Baltimore; Williams & Wilkins.


Sleutel, Martha; An Overview of Vibro Acoustic Stimulation; JOGNN, November/December, 1989, 447-452.