Approved by Quality & Patient Care Committee
7 July 2016

FETAL ELECTRODE APPLICATION

1. AIM

- Appropriate and correct application of a fetal electrode to ensure accurate monitoring of fetal heart rate

2. PATIENT

- Fetus with a cephalic/breech presentation who requires continuous electronic fetal monitoring and for whom accurate external monitoring is not possible
- Labouring woman with ruptured forewaters who does not have:
    - Hepatitis B and/or C infection
    - HIV infection
    - Primary Genital Herpes
    - Group B streptococcus (GBS) positive status (unless covered with appropriate antibiotics at least 30 minutes prior to application of fetal electrode)

3. STAFF

- Medical and midwifery staff

4. EQUIPMENT

- Cardiotocograph monitor (CTG)
- Fetal electrode
- Fetal electrode lead and leg attachment
- Amnihook (if required)
- Personal Protective Equipment (PPE)

5. CLINICAL PRACTICE

- Discuss need for fetal electrode with the woman and her partner/support people and obtain verbal consent
- Document evidence of this discussion in the integrated clinical notes
- Consider the use of an ultrasound to confirm the presence of fetal heart rate (FHR)
- Do not apply a fetal electrode if suspected fetal death
- Perform abdominal palpation to determine fetal lie and presentation.
- Time out performed to confirm patient, consent and procedure
- Perform vaginal examination to confirm absence of membranes and determine fetal presentation and position
- Apply electrode as per manufacturer's instructions, ensuring it is not applied to the fetal face, fontanelles or sutures. In the case of a breech presentation ensure the electrode is attached to the fetal buttock, carefully avoiding genitalia
- Attach the electrode wire to lead attachment that is applied to the woman's leg and connect the lead to the CTG monitor
- Commence monitoring and ensure satisfactory recording is obtained
- Explain findings to the woman and document in the integrated clinical notes and partogram
- Ensure safe removal of the electrode prior to, or at time of birth and dispose of it in a sharps container
- Leave fetal electrode on in the instance of a transfer to operating theatre until monitoring can be ceased
- Remove prior to commencement of surgery or procedure in theatre

LOCAL OPERATING PROCEDURE

CLINICAL POLICIES, PROCEDURES & GUIDELINES

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FETAL ELECTRODE APPLICATION cont'd

6. DOCUMENTATION

- Integrated Clinical Notes
- Partogram
- ObstetriX

7. EDUCATIONAL NOTES

- Clear benefit to the fetus should be established prior to the application of a fetal electrode as this is an invasive procedure with the potential of causing trauma or infection to the fetus
- Electronic fetal monitoring is limited in its capacity to predict neonatal condition, and has failed to lead to reduced rates of cerebral palsy and neurological injury
- The fetal electrode may inadvertently pick up the maternal heart rate particularly when the fetus is demised

8. RELATED POLICIES/ PROCEDURES/GUIDELINES

- Intrapartum Fetal Heart Rate Monitoring
- Vaginal Examinations in Labour
- Fetal Blood Sampling – Intrapartum
- Breech Vaginal Birth
- Hepatitis B Positive Mothers and Their Babies
- Hepatitis C Positive Mothers and Their Babies
- Herpes Simplex in Pregnancy and Birth
- Human Immunodeficiency Virus (HIV) in Pregnancy, Birth and Postpartum Period
- Group B Streptococcus (GBS) Screening and Prophylaxis

9. RISK RATING

- Low

10. NATIONAL STANDARD

- CC – Comprehensive Care

11. REFERENCES

1 Acker, D (2007) Clinical pearls in application of electronic fetal heart rate monitoring. www.uptodate.com

2 ACOG (2005) Intrapartum Fetal Heart Rate Monitoring. ACOG Practice Bulletin Number 70. Obstetrics & Gynecology Vol. 106, No. 6, December 2005

3 RANZCOG (2014) Clinical Guidelines: Intrapartum Fetal Surveillance 3rd Edition

4 Thacker, S., Stroup, D and Peterson H. (2005) Continuous electronic fetal heart monitoring during labour. (Cochrane Review) In: *The Cochrane Library*, Issue 1. Oxford: Update Software

5 NSW Health PD _ 2016 Planned Vaginal Breech Service Provision

REVISION & APPROVAL HISTORY

Reviewed and endorsed Maternity Services LOPs group 21/6/16
Previous title *Fetal Scalp Elecrode (FSE) Application Guideline*
Approved Patient Care Committee 5/6/08
Endorsed Obstetrics Clinical Guidelines group June 2008

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