



Issue date

17 November 2023

Distributed to:

Chief Executives
Directors of Clinical Governance
Director, Regulation and Compliance Unit

Action required by:

Chief Executives
Directors of Clinical Governance

We recommend you also inform:

Directors, Managers and Staff of:

- Maternity Services

Expert Reference Group

Content reviewed by:

- Senior Clinical Advisor Obstetrics
- CEC Maternal and Perinatal Patient Safety Team
- CEC Maternity, Neonatal and Paediatric Safety Programs

Clinical Excellence Commission

Tel: 02 9269 5500

Email:

CEC-PatientSafety@health.nsw.gov.au

Internet Website:

<https://www.health.nsw.gov.au/sabs/Pages/default.aspx>

Intranet Website:

<http://internal.health.nsw.gov.au/quality/sabs/index.html>

Review date

November 2024

Updated: Electronic Fetal Monitoring during water immersion

What has been updated from SI:010/21?

Updated advice due to a change in suppliers for the use of Fetal Spiral Electrodes (FSE) during water immersion.

Situation

All suppliers of Fetal Spiral Electrodes (FSE) available to NSW Health advise against their use during water immersion.

Background

Water immersion in labour is supported by NSW Health [GL2018_025](#). Where clinically indicated and following an individual risk assessment, all birth units should offer women the option of waterproof wireless telemetry. Intrapartum Electronic Fetal Monitoring (EFM) is performed as a screening assessment to identify the fetus at risk of hypoxia. FSEs should only be used when the fetal heart cannot be recorded effectively externally. It is essential to consider the clinical factors leading to the recommendation of FSE application which may also exclude a woman from water immersion.

Assessment

- Current suppliers advise that FSEs are not to be used during water immersion as this practice either impacts the Cardiotocography (CTG) recording, or they have not been validated for use in these conditions. This includes:
 - FSEs compatible with the Phillips Avalon CTG machine:
 - Incarta - Goldtrace Neoventa FSE (preferred replacement following Philips ceasing FSE production)
 - Clifford Hallam - Copeland FSE by Rocket Medical
 - FSEs compatible with the General Electric CTG machine:
 - Vyair FSE
- Avalon CL (cableless) transducers (by Philips) can withstand immersion in up to 1 metre of water for up to 5 hours.

Clinical Recommendations

- EFM using FSE is not recommended during water immersion.
- Cableless EFM with an abdominal transducer can be used during water immersion.
- Conduct and document an individualised risk assessment of a woman's suitability for water immersion when continuous EFM is required.
- Where EFM is used during water immersion, ongoing assessment of maternal and fetal wellbeing in accordance with relevant guidelines is essential in order to identify when water immersion with continuous EFM is no longer suitable.
- Review and incorporate FSE advice into the local guidelines for water immersion for labour and birth



Required actions for the Local Health Districts/Networks

1. Distribute this Safety Information to all relevant clinicians, clinical departments where women have access to water immersion in labour.
2. Include this Safety Information in relevant handovers and safety huddles.
3. Undertake a local risk assessment and develop strategies to mitigate the risk of incorrect use of FSEs.
4. Report any incidents associated with these [devices] into [ims+](#) and [TGA](#).