

Holding for a Lumbar Puncture: Infant

A Lumbar puncture is a procedure where a needle is inserted into the spinal canal to collect cerebrospinal fluid to assist in the diagnosis of diseases, affecting the central nervous system.

1 PREPARE

Explain the procedure and gain verbal consent.



2

Attend to hand hygiene and don PPE. Attach infant to cardiorespiratory monitoring.



3

PROCEDURE

Place the infant on the edge of the cot or bed, held in a lateral position, facing the holding nurse. For seated position, see below.



4

Position by holding the infant's shoulders and legs, curling the infant into the fetal position.



5

Ensure the head and neck remain in the neutral position, by avoiding direct flexion or extension (to prevent airway obstruction).



6

Ensure the hips and shoulders remain in line and at 90 degrees to the cot/bed.



7

Monitor the infant throughout the procedure for signs of airway obstruction.



8

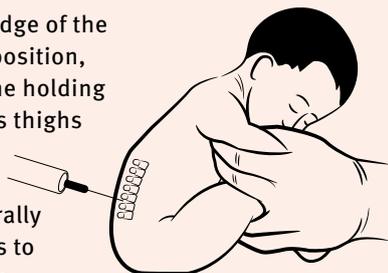
Once the procedure is complete, promptly re-dress the infant to ensure they do not become hypothermic.



SITTING POSITION

Hold the infant on the edge of the cot or bed, in a sitting position, with the infant facing the holding nurse. Place the infant's thighs against abdomen.

Their head should naturally fall forwards. Use hands to hold their arms and legs.



ALERT

Excessive flexion of the head and neck can cause airway obstruction.

Do not leave the infant unattended if the side of the cot/bed is lowered.

Seek prompt senior nursing/medical advice for any child suffering any adverse effects of holding such as hypoxia.



Tips in children

- If permitted, use sucrose in infants, to minimise procedural discomfort. A medical order is required, and parental consent is required prior to use. Please note at selected sites sucrose may be classified as a nurse initiated medication. Check your local policy or procedure for more information.
- Discuss with the medical officer if a topical anaesthetic, applied prior to the procedure to numb the site, is appropriate.
- Use overhead heating if available during the procedure to keep the infant warm.

For further information:

[CHQ Guideline: Paediatric Lumbar Puncture](#)

Video:

[Holding a neonate or infant for a Lumbar Puncture](#)

References:

This Queensland Paediatric Emergency Nursing Skill Sheet was developed by the Emergency Care of Children working group (funded by the Queensland Emergency Department Strategic Advisory Panel) with the help of the following resources:

Children's Health Queensland Hospital and Health Service. (2017, May 3). Paediatric Lumbar Puncture. Queensland Health Intranet. https://qheps.health.qld.gov.au/_data/assets/pdf_file/0028/1521595/gdl-15008.pdf

Gold Coast Hospital and Health Service/ Women's, Newborn and Children's Services. (2020, June 11). Neonatal Lumbar Puncture. <http://gchweb.sth.health.qld.gov.au/Documents/PRO1698>. <http://gchweb.sth.health.qld.gov.au/documents/PRO1698>

The Royal Children's Hospital Melbourne . (n.d.). Lumbar Puncture. Royal Children's Hospital Clinical Practice Guidelines. Retrieved March 20, 2020, from https://www.rch.org.au/clinicalguide/guideline_index/Lumbar_puncture/

Nursing Skill Sheet Legal Disclaimer

The information contained in the Queensland Paediatric Emergency Care nursing skill sheets are intended for use by nursing staff for information purposes only. The information has been prepared using a multidisciplinary approach with reference to the best information and evidence available at the time of preparation. No assurance is given that the information is entirely complete, current, or accurate in every respect. The nursing skill sheets are not a substitute for clinical judgement, knowledge and expertise, or medical advice. Variation from the nursing skill sheets, taking into account individual circumstances may be appropriate. This does not address all elements of standard practice and accepts that individual clinicians are responsible for the following:

- Providing care within the context of locally available resources, expertise, and scope of practice.
- Supporting consumer rights and informed decision making in partnership with healthcare practitioners including the right to decline intervention or ongoing management.
- Advising consumers of their choices in an environment that is culturally appropriate and which enables comfortable and confidential discussion. This includes the use of interpreter services where necessary.
- Ensuring informed consent is obtained prior to delivering care.
- Meeting all legislative requirements and professional standards.
- Applying standard precautions, and additional precautions as necessary, when delivering care.
- Documenting all care in accordance with mandatory and local requirements.

Children's Health Queensland disclaims, to the maximum extent permitted by law, all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs incurred for any reason associated with the use of this nursing skill sheet, including the materials within or referred to throughout this document being in any way inaccurate, out of context, incomplete or unavailable.

