

Intracutaneous Sterile Water Block Injection (Labour)

Site Applicability

SPH Maternity Centre

Practice Level

Perinatal Registered Nurses & Registered Midwife

Policy Statements

A Prescribers order is required for administration of sterile water block

Need to Know

Clinical Indication: Pain management in active labour

Intracutaneous sterile water block is a non-pharmacological method for providing back pain relief in labour. The technique is based on the gate theory of pain, but may also release opioid endorphins.





Equipment and Supplies

- Sterile Water for Injection, 10 mL
- 2% chlorhexidine gluconate with 70% isopropyl alcohol swabs
- Syringe: Insulin 0.5 mL, #29 gauge **OR** Tuberculin 1 mL, #25 gauge

Procedure

Steps

1. Obtain the woman's verbal consent for the procedure
2. Position the woman either standing or sitting on the edge of the bed

	
<p>3. Landmark & Mark Injection Site:</p> <ul style="list-style-type: none"> • Palpate the iliac crest. • The posterior superior iliac spines are bony prominences lateral to the sacrum and below the iliac crest. 	<p>Mark Injection Site:</p> <ul style="list-style-type: none"> • Identify and landmark the four sites on the woman's back using a pen. Lower land mark are at 25 degree 2 to 3 cm below upper land mark
	
<p>4. Sterile Water Injection:</p> <ul style="list-style-type: none"> • Cleanse the sites with a chlorhexidine/ alcohol swab and allow to dry. • With bevel facing upwards, administer 0.05 to 0.1 mL sterile water just under the dermis into each site quickly. 	<p>Appearance of Injection site:</p> <ul style="list-style-type: none"> • A bleb is created when the fluid is given appropriately in the intradermal space • Do not massage the injection site

- Injection can be repeated if the woman requests
- The use of nitrous oxide/oxygen inhalation during the injections is an option

Documentation

Document on Interprofessional Progress Notes pain level and how patient is coping post injection
Indicate in the Labour Partogram: Section 5 Procedure and Interventions patient received
Intracutaneous Sterile Water Block Injection

Patient and Family Education

Sterile water injection is a pain management method to assist with back pain. It involves 4 small subcutaneous injections given over the sacrum during a contraction. The injection of the sterile water is painful for approximately 10 to 20 seconds. Pain relief occurs within two minutes and lasts from 30 minutes up to three hours. Injection can be repeated after pain relief effect subsidize. If patient is not satisfied with pain relief post injection; patient can request an alternative pain management method (e.g. fentanyl, Entonox, epidural). There is no side effect to the fetus with the sterile water injection.

Related Documents

1. [B-00-13-10113](#) - Pain Management (Opioid) During Labour
2. [B-00-13-10027](#) - Entonox: Use in the Maternity Centre

References

1. British Columbia Women's Hospital, (2016). Sterile Water Block WW.05.15. Fetal Maternal Newborn and Family Health Policy & Procedure Manual.
2. Hutton, E.K., Kasperink, M., Rutten, M., Reitsma, A., and Wainman, B. (2009). Sterile water injection for labour pain: a systematic review and meta-analysis of randomised controlled trials. *An International Journal of Obstetrics and Gynaecology*. Aug2009; 116(9):1158-1166.
3. Lee, N., Kildeaa, S., and Stapleton, H., (2017). "No pain, no gain": The experience of women using sterile water injections. *Women and Birth* 30 (2017) 153–158.
4. Lee, N., Webster, J., Beckmann, M., Gibbons, K., Smith, T., Stapleton, H., Kildea, S., (2013). Comparison of a single vs. a four intradermal sterile water injection for relief of lower back pain for women in labour: A randomised controlled trial. *Midwifery*, 29, 585-591.
5. Reynolds, J., (2002). Sterile water injection as a unique way to relieve back pain in labour. *International Journal of Childbirth Education*. 17, 24-25.
6. Bahasadri, S., Ahmadi-abhari, S., Dehghani-nik, M., Habibi, G.R., (2006). Subcutaneous sterile water injection for labour pain: A randomised controlled trial. *Australian and New Zealand Journal of Obstetrics and Gynaecology*; 46: 102–106

Persons/Groups Consulted:

Practice Lead, Registered Midwife
Obstetrician
Anesthesiologist
Nurse Educator Maternity
Patient Care Manager Maternity
Clinical Nurse Leader Maternity

Developed By:

Clinical Nurse Specialist Maternity & Cardiac Obstetrics

This material has been prepared solely for use at Providence Health Care (PHC), Provincial Health Services Authority (PHSA) and Vancouver Coastal Health (VCH). PHC, PHSA and VCH accept no responsibility for use of this material by any person or organization not associated with PHC, PHSA and VCH. A printed copy of this document may not reflect the current electronic version.

Effective Date:	22-JAN-2019
Posted Date:	22-JAN-2019
Last Revised:	
Last Reviewed:	
Approved By:	PHC
	Maternity Safety and Quality Committee Professional Practice Standards Committee
Owners:	PHC
	Maternity