Approved by Quality & Patient Safety Committee
17 September 2020

HEEL PRICK FOR BLOOD SAMPLING

This Local Operating Procedure is developed to guide safe clinical practice in Newborn Care Centre (NCC) at The Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this Local Operating Procedure.

1. AIM

- To collect capillary blood by correct heel stick technique

2. PATIENT

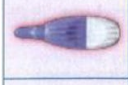
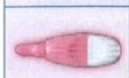
- Newborns

3. STAFF

- Medical and nursing staff

4. EQUIPMENT

- Gloves
- Gauze
- Appropriate Puncture Device
- 0.5% Chlorhexidine Swab
- Required Blood/Capillary Tubes
- 25% Oral Sucrose or breast milk

Device	Device Name	Device Type	Width x Depth (mm)	Intended Use[4]	
	BD Microtainer® Contact-Activated Lancet (Purple)	Puncture (needle)	30 G x 1.5 mm	Fingerstick – Low Flow (single drop) Demonstrates significantly less pain for your patients than comparable products*	Preterm (BSL only)
	BD Microtainer® Contact-Activated Lancet (Pink)	Puncture (needle)	21 G x 1.8 mm	Fingerstick – Medium Flow	Not used in NCC
	BD Microtainer® Contact-Activated Lancet (Blue)	Puncture (blade)	1.5 mm x 2.0 mm	Fingerstick – High Flow (500 µL from single puncture)	Not used in NCC
	BD Microtainer® Quikheel™ Lancet (Pink)	Incision (blade)	1.75 mm x 0.85 mm	Heelstick – Low Flow (premature infants) Low birth-weight babies or full-term infants where lower blood volume is required	Preterm (all other blood tests)
	BD Microtainer® Quikheel™ Lancet (Teal)	Incision (blade)	2.5 mm x 1.0 mm	Heelstick – High Flow (infants) Full-term infants where higher blood volume is required	Term (all other blood tests)

Picture 1

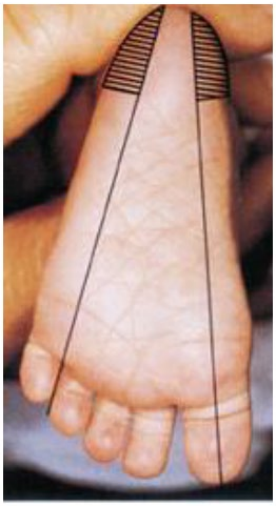
5. CLINICAL PRACTICE

Procedure:

1. Perform hand hygiene and clean blue tray.
2. Collect equipment. Select the appropriate puncture device (Picture 1).
3. Administer 25% sucrose or breast milk and provide comfort measures (eg. swaddling, skin contact)
4. Perform hand hygiene, apply gloves and prepare equipment.
5. Nominate an area for puncture on the foot on the medial or lateral plantar surface (Picture 2).
6. Select the surface area to puncture. Continue in a “stepping” ladder pattern from the first puncture for subsequent blood sampling.
7. Clean foot with 0.5% chlorhexidine wipe and allow to dry for 30 seconds.

HEEL PRICK FOR BLOOD SAMPLING cont'd

8. Puncture heel holding the puncture device at a 90 degree angle (Picture 3 & 4).

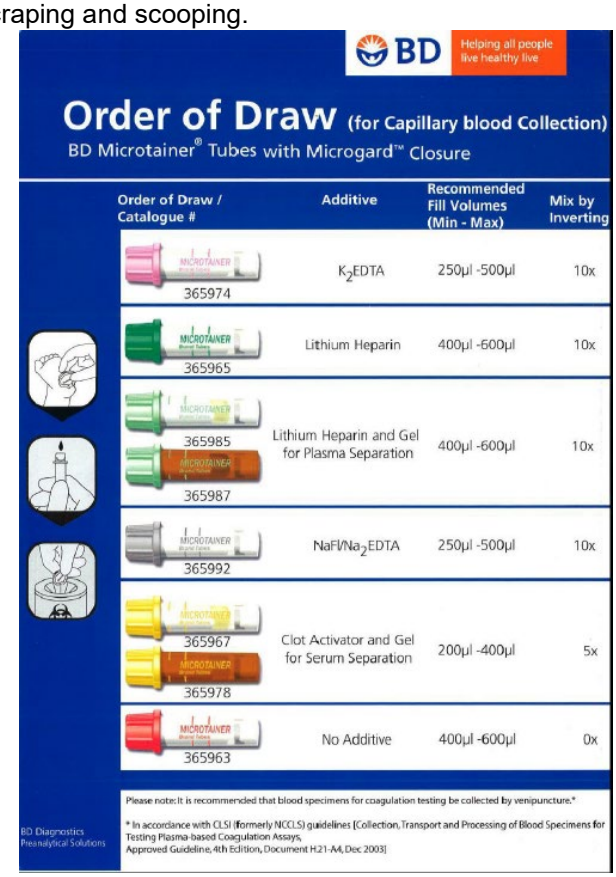


Picture 2

Picture 3

Picture 4

9. Wipe away first drop of blood with gauze.
10. Collect blood in correct order of draw (Picture 5), gently agitating tubes between each drop while avoiding scraping and scooping.



Picture 5

HEEL PRICK FOR BLOOD SAMPLING cont'd

11. Seal blood containers.
12. Apply direct pressure to puncture site until bleeding stops.
13. Label collection tubes with correct infant's name label.
    NB. Must be hand written if collecting for blood group and hold. Must also be countersigned by a second clinician.
14. Dispose of puncture device in sharps container.
15. Collect and dispose of remaining equipment.
16. Clean blue tray and remove gloves.
17. Perform hand hygiene.

6. DOCUMENTATION

- eMR
- Neonatal Observation Chart
- Pathology Request Form

7. RELATED POLICIES/PROCEDURES/CLINICAL PRACTICE LOP

- NSW Health Policy Document PD2017_013. Infection Prevention and Control Policy.
- NSW Health Guideline GL2018_013. Work Health and Safety - Blood and Body Substances Occupational Exposure Prevention

8. RISK RATING

- Low

9. NATIONAL STANDARD

- Standard 1 Clinical Governance
- Standard 3 Preventing and Controlling Healthcare-Associated Infections
- Standard 5 Comprehensive Care
- Standard 6 Communicating for Safety
- Standard 7 Blood Management

10. ABBREVIATIONS AND DEFINITIONS OF TERMS

NCC	Newborn Care Centre	BSL	Blood Sugar Level

11. REFERENCES

- ANTT® Clinical Practice Framework, Version 3.1 Copyright 2013. The Association for Safe Aseptic Practice (ASAP). www.antt.org.
- BD Asia Pacific, 2010. Capillary Blood Collection – Key Aspects of Best Practice, Sources of Preanalytical Error and Laboratory Workflow Challenges. Asia Pacific Preanalytical Notes, 13 (1), p2-4.
- BD Diagnostics 2009. Capillary Blood Collection: Best Practices. Lab Notes, 20 (1), p1-5.
- CLSI H4-A5. Procedures and Devices for the Collection of Diagnostic Blood Specimen by Skin Puncture, Approved Fifth Edition, 24 (21).

12. AUTHOR

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Revised	17.4.18 8.9.20	E Siddons (RN) E Siddons (RN), NCC LOPs Committee

REVISION & APPROVAL HISTORY
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