

TO LANCE OR NOT TO LANCE THAT IS THE QUESTION!

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WHAT IS THE BEST PRACTICE, VENEPUNCTURE OR FINGER/HEEL LANCING, FOR OBTAINING A DIGNOSTIC BLOOD COLLECTION OF 1 - 3 TUBES TO MINIMISE PAIN AND DISCOMFORT IN A YOUNG CHILD?



INTRODUCTION

Having a young child (aged between 0 – 5 years old) can be a stressful experience in itself but when you have to watch, listen and even sometimes hold your child while their finger or heel is being lanced, then squeezed to get enough blood out for testing 1-3 tubes, it can be very traumatic for the parent or guardian, especially when they are already anxious because their young child needs tests or further testing for a diagnosis.

EVEN more so for the young child, who probably does not understand why this pain is being inflicted on them.

LITERATURE REVIEW / FINDINGS

According to Shah & Ohlsson (2011) finger or heel lancing is a painful and distressing procedure, with no favourable pain relief to minimise this pain - the evidence for this included pain scales, how the parents or guardians rated their child's pain levels and the cry duration of the young child. Ogawa, Ogihara, Fujiwara, Ito, Nakano, Nakayama, Hachiya, Fujimoto, Abe, Ban, Ikeda, Tamai (2005) concludes that when performed by a skilled phlebotomist or paediatrician, venepuncture is the best method of practice for

obtaining a diagnostic blood collection of 1-3 tubes, to minimise pain and discomfort in young children. They state that venepuncture causes less pain, takes less time, does not require the need for more than one skin puncture and gives an increased sample volume. On the other side, Hands (2010) argues that venepuncture promotes an adverse physical and psychological effect on a child. That there is a lack of training for phlebotomist or paediatrician resulting in multiple venepuncture attempts made causing pain and discomfort to the young child.



IMPLICATIONS

The implications for the clinical setting however is the need of a skilled phlebotomist or paediatrician, and in a small team this is rarely available and would take extra time and extra expense to train someone.

The implications with finger or heel lancing though are that it is a limited type of diagnostic blood samples that can be obtained by lancing.

In both procedures there is the recommendation for the use of pharmacological and therapeutic techniques to be used in conjunction for minimising the pain and discomfort.

CONCLUSION

Although you cannot change the preferred method of practice in your DHB, you can make your own informed decision about each individual case, and if you believe venepuncture would be more beneficial to your patient then advocate for that procedure or upskill to be able to offer it yourself. In the meantime use the addition of pharmacological and therapeutic techniques to help minimise the pain and encourage other staff members to do so also and educate them on the findings of this review.

REFERENCE

Hands, C. (2010). Evaluating venepuncture practice on a general children's ward. Paediatric Nursing, 22(2), 32-35.

Ogawa, S., Ogihara, T., Fujiwara, E., Ito, K., Nakano, M., Nakayama, S., Hachiya, T., Fujimoto, N., Abe, H., Ban, S., Ikeda, E., & Tamai, H., (2005). Venepuncture is preferable to heel lance for blood sampling in term neonates. Arch Dis Child Fetal Neonatal, 90, 432–436.

Shah, VS., & Ohlsson, A. (2011). Venepuncture versus heel lance for blood sampling in term neonates. Cochrane Database of Systematic Reviews 2011, Issue 10. Art. No.: CD001452. DOI: 10.1002/14651858.CD001452.pub4.





Population	Young children 0-5 years, who need diagnostic blood tests taken.	This was the age range that we took the most amount of diagnostic blood collection from in my clinical setting.
Exposure	Young children who need $1-3$ tubes of diagnostic blood collection taken for testing and which method is most commonly used.	I will be looking for articles that suggest where either finger or heel lancing or venepuncture is most commonly used and why.
Comparison	Finger or heel lancing vs Venepuncture	In SCDHB we currently use finger or heel lancing so am interested to see the relevant literature of comparing the two methods of practice.
Outcome	Which method of practice minimises the amount of pain shown by an infant.	I want to know the outcome of which method of practice is most commonly used to minimise the pain that the infant shows and how relevant we are with our current practice.
Time	No timeframe	

Rational

I am a visual person, but who is not very tech savvy so I thought a poster presentation would work to my strengths and also found literature that states that a poster presentation is commonly used to promote the sharing of knowledge (Ilac, & Rowe, 2013). To do this, Ilac and Rowe (2013) suggest that a poster should emphasises the main points of the findings of your research, shows the information clearly and capture the targeted audiences attention quickly and encourage their curiosity for your topic. I have noticed that some nurses can get stuck in their old ways, and forget to upskill or research new and improved ways to perform procedures, so a quick glance at a posters which is eyecatching and visually creative to entice their attention, may help increase their knowledge, alter their behaviours and change their attitudes towards possible improvements for everyday procedures (Miller, 2007).

Reference

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