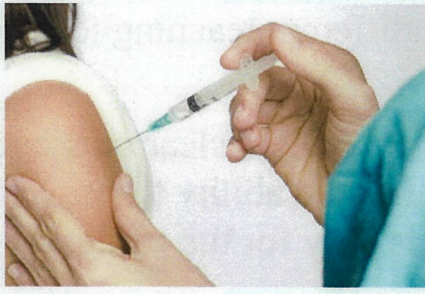


To Aspirate or Not Aspirate?

Is it currently 'best practice' by nurses to aspirate when giving intramuscular injections in all sites?

Introduction:



The technique of aspiration, which is also referred to as drawing back is regularly used in practice when administering intramuscular injections (IM). The purpose of aspiration is to reduce the risk of incorrectly injecting the needle, striking a vein and injecting straight into the bloodstream.



Aspiration with IM injections is currently taught to undergraduate nurses in New Zealand as it is still portrayed as 'best practice' in relevant nursing textbook guidelines.

In New Zealand there is no clear guideline for nurses to follow to determine whether or not to aspirate unless it has been stated in the hospital or practice policy guidelines. There is also more literature and relevant evidence based research becoming available that suggests aspiration may no longer be required in practice.

Literature review:

Majority of the relevant and current literature suggested that aspiration is becoming less common as technology advances and nurses become more skilled and experienced in practice (Floyd & Meyer, 2007). There is also no published evidence in relation to incorrect administration of IM injections due to not aspirating.

Implications of practice:

Positive benefits of aspiration include

- Ensures correct administration of the medication therefore can have the desired effect on the body, prevents overdose and adverse effects (Dempsey, Hillege, Hill & Taylor, 2014).
- Reassures inexperienced nurses (e.g. New graduates or student nurses) that they are injecting correctly. Also allows nurses to be able to restart the injection process if they draw back blood.

Negative factors of aspiration include

- The use of auto disposable syringes for vaccinations in practice results in a inability to aspirate due to the syringes no draw back mechanism (Sisson, 2015).
- Aspiration has been proven to cause added pain and discomfort to the injection experience compared to not aspirating (Ipp, Taddio, Sam, Gladbach & Parkin, 2007).
- Nurses prefer not to aspirate to reduce the time it takes to give the injection (necessary to aspirate for 5-10 seconds to see blood return) (Hettinger & Jurkovich, 2017). This is often necessary when giving children injections.
- Aspiration has the potential to cause tissue damage (McGrath, 2005).

Summary:

It is important to continue to aspirate if you are unsure of the patients anatomy, your technique and competence. However there is no legislation stopping nurses from not aspirating if they have relevant evidence to make a clinical judgement to not aspirate. It is very clear that there needs to be more research carried out to support the technique of aspiration and clearer guidelines need to be set by the World Health Organisation. Due to the lack of research supporting aspiration it cannot be seen as 'best practice'. Greater research in this area is extremely necessary and important for the safety of the patients in care and nurses confidence in practice.

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By Brianna Fogarty

The major rationale for choosing to present my clinical issue and research findings in poster format is that I wanted to have the ability to distribute the evidence I have found across a varying and wide group of people. The aim of the poster was to make people more aware that the decision to aspirate or not aspirate is often not clear in practice and often is determined by personal preference rather than the most relevant evidenced based research. I want to distribute the poster amongst GP practices, Hospitals, nursing and medical institutions to educate people around the positives and negatives of aspirating when giving IM injections and the reasoning behind this. I wanted to make people aware of the unclear guidelines so they realise the need for more research and potentially different teaching techniques in practice.

The purpose of a poster is to summarise research and ideas and to engage the reader by displaying a clear message by using logical flow throughout the poster (Erren, & Bourne, 2007). A successful poster has the ability to convey a message if it is concise and to the point. My poster reflects a clear and simple layout that is easy for the reader to understand.

PECOT Heading	Information relating to the question	Explanation
P-Population	Nurses in practice	I identified nurses to be the population to focus on as they are often the ones who administer intramuscular injections more regularly than doctors and other medical staff
E-Exposure/ Environment (Intervention)	Aspirating when giving an intramuscular injection.	As my main focus of this literature review is aspirating I chose to look at studies involving aspiration when giving injections
C-Comparison/ Control	To not aspirate when giving an intramuscular injection.	By having my control 'as to not aspirate' it will give me an idea of the reasoning behind this and the volume of nurses who choose not to aspirate.
O-Outcome	To use a technique that is seen to be best practice and safest for the patient.	For my literature review I wanted to find out which technique is the safest form of practice, which has been proven by evidence based practice and current research
T-Time	Not relevant to my literature review	Not relevant to my literature review