O3_A2_A_Scientific Evidence

SUBCUTANEOUS AUTOMATIC SYRINGE PERFUSION

Q7	**Is there any difference in the frequency of changing of the butterfly for subcutaneous administration of drugs if the butterfly is positioned bevel up versus bevel down for subcutaneous injection**
Patients	**Patients elderly and/or frail and/or end of life indications in a palliative facility** **Frail, aged, end of life adults** **Children in a palliative facility**
Intervention	**butterfly is positioned bevel up**
Comparator	**butterfly is positioned bevel down**
Outcome	**Core outcome measures:** **Quality of life.**
Methodology	**Systematic reviews** **Randomized controlled trials** **Cohort studies** **Registry studies**
Extra	

Studies: Two studies reported controversial data [1, 2].

Indications [1, 2]:

- The positioning of the butterflies with the bevel down is associated with a longer resistance in time at the site of insertion, and causes fewer local complications compared to the sc butterflies positioned with the bevel up, but concerning the pain scores significantly higher pain scores were observed when the needle was placed bevel down compared with bevel up.

Conclusions:

CONTROVERSIAL

1. The positioning of the butterflies with the bevel down (experimental group) is associated with a longer resistance in time at the site of insertion, and causes fewer local complications compared to the sc butterflies positioned with the bevel up (control group). [1]

2. Significantly higher pain scores were observed when the needle was placed bevel down compared with bevel up (P = .02). No significant differences in pain scores were noted between the groups for age and gender. [2]

References:

1. Mitrea N, Mosoiu D, Vosit-Steller J, Rogozea L. Evaluation of the optimal positioning of subcutaneous butterfly when administering injectable opioids in cancer patients. Clujul Med. 2016;89(4):486-492. Epub 2016 Oct 20.

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2. Candiotti K1, Rodriguez Y, Koyyalamudi P, Curia L, Arheart KL, Birnbach DJ. The effect of needle bevel position on pain for subcutaneous lidocaine injection. J Perianesth Nurs. 2009 Aug;24(4):241-3. doi: 10.1016/j.jopan.2009.04.003.

Q8	**Is there any difference in the frequency of complications at the site of subcutaneous injection via butterfly if the butterfly is positioned bevel up versus bevel down for subcutaneous injection**
Patients	**Patients elderly and/or frail and/or end of life indications in a palliative facility** **Frail, aged, end of life adults** **Children in a palliative facility**
Intervention	
Comparator	
Outcome	**Core outcome measures:** **Quality of life.**
Methodology	**Systematic reviews** **Randomized controlled trials** **Cohort studies** **Registry studies**
Extra	

Studies: One study reported data. [1].

Indications [1, 2]:

- The positioning of the butterflies with the bevel down is associated with a longer resistance in time at the site of insertion, and causes fewer local complications compared to the sc butterflies positioned with the bevel up, but concerning the pain scores significantly higher pain scores were observed when the needle was placed bevel down compared with bevel up.

Conclusions:

The positioning of the butterflies with the bevel down (experimental group) is associated with a longer resistance in time at the site of insertion, and causes fewer local complications compared to the sc butterflies positioned with the bevel up (control group). [1]

References:

1. Mitrea N, Mosoiu D, Vosit-Steller J, Rogozea L. Evaluation of the optimal positioning of subcutaneous butterfly when administering injectable opioids in cancer patients. Clujul Med. 2016;89(4):486-492. Epub 2016 Oct 20.

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