Pain Management with Subcutaneous Infusions (20) convoted



(i) Background



Relief and comfort are key focal points in pain management, especially in palliative care



Venous depletions are a growing concern with the use of intravenous infusions (IV), due to an ageing population1



Subcutaneous route (SC) may provide an effective alternative route for the delivery of pain medication^{1,2}

This summary highlights key evidence supporting the use of the SC route as an effective, alternative option for pain management.



Infusion Therapy Standards of Practice (2024):3 Recommend consideration of the SC route as an alternative to IV route as part of a vessel health and preservation strategy

Evidence overview

Fürst P, et al. BMC Palliat Care 2020;19:172.2

Study design



- Observational cohort study of imminently dying patients with pain who had been admitted to special palliative inpatient wards and introduced to continuous SC infusions with an ambulatory infusion pump (AIP)
- Patients were monitored daily

Baseline characteristics



Of the 93 patients in the total cohort, 47 patients survived ≥3 days (main study group)



Median survival: 5 days



Median age: 76 years



53% female

Reasons for initiating continuous SC infusions

Most common reasons:

- Inability to swallow oral medication (n=49; 53%)
- Uncontrolled pain with oral medication (n=27; 29%)

Results

Initiation of continuous SC infusions, as an alternative route to oral for pain medication in dying patients, was shown to:



There was no clinically significant increase in adverse events, such as delirium and respiratory depression

Broadhurst D, et al. *PLoS One* 2020;15:e0237572.1

Study design



- Systematic literature review (SLRs) of SC hydration and medication infusion SLRs
- Carried out between 1990 and June 2020

Results



EFFECTIVENESS



SC medications were found to be equivalent in efficacy to other routes, such as IV and oral



Extensive evidence on SC morphine compared to IV/other routes, demonstrating good effectiveness and safety

ACCEPTABILITY



Some studies reported patient preference for SC route compared to IV route, due to:

reduced side effects, reduced time involved, home/independent administration, convenience and overall comfort

EFFICIENCY



SC therapy may be less costly than IV therapy

Conclusions



In an observational cohort study, continuous SC via AIP was shown to be effective at reducing pain, with no clinically significant changes in adverse events, in dying patients who had stopped responding to, or were no longer able to take, oral medication



This was supported by an SLR of SLRs which found the efficacy of SC therapy to be equivalent to both IV and oral route

SC therapy has also been shown to be preferred by some patients and may be associated with reduced costs compared to IV therapy

Neria™ Guard

- Neria[™] Guard is specifically designed and approved for SC infusion of pain medications^{4*}
- $Neria^{\text{\tiny{TM}}}\,Guard\ is\ an\ all-in-one,\ infusion\ set\ with\ an\ integrated\ automatic\ insertion\ device\ and\ a\ soft$ cannula.4 With just a few user steps and a hidden retractable inserter needle, it has been designed to support simplicity and ease of use in both home and hospital settings⁴

- 1. Broadhurst D, et al. *PLoS One* 2020;15:e0237572;
- 2 Fürst P et al. BMC Palliat Care 2020:19:172:
- 3. Nickel B, et al. J Infus Nurs 2024;47(1S):S1-S285;
- 4. Convatec IC, data on file, D012-002912, 2023.

*Please refer to the instructions for use that come with the Neria ${}^{\!\top\!\!\!M}\!\mathsf{Guard}$ infusion set for intended use and indications.

This document is intended for healthcare professionals only. Please always consult with the instructions for use, which come with the product.