“This observational study assessed the clinical practice of subcutaneous drug administration, focusing on the evaluation of local reactions or complications to further develop recommendations.” Bartz et al (2014).

Reference:


Abstract:

CONTEXT: Especially in palliative care, safe and manageable administration of medication is essential. Subcutaneous drug administration is a possible alternative, when oral intake is hampered. However, evidence for this method is rare.

OBJECTIVES: This observational study assessed the clinical practice of subcutaneous drug administration, focusing on the evaluation of local reactions or complications to further develop recommendations.

METHODS: Over 14 months, patients in a specialized inpatient palliative care unit treated by the subcutaneous route were invited to participate in this clinical study. All subcutaneous medications including dosage and volume of injection, type of needles, and injection site were documented. The injection sites were systematically assessed including the subjective perceptions of patients for analysis of patient tolerability and acceptability. T-tests and Chi-squared tests of these variables were performed to calculate group differences between needles with vs. without complications (P < 0.05).

RESULTS: In 120 patients, 3957 applications were administered via 243 needles. The needles were placed in thighs (38.7%) and upper arms (28.8%). Most frequently used medications were hydromorphone (59.0%), haloperidol (12.3%), and midazolam (8.3%). Complications were diagnosed most often on the third or fourth day of the needle in situ and occurred significantly more often in (fully) active patients and patients transferred or discharged at the end of treatment. The mean time of needle in situ was significantly lower (4.1 vs. 5.0 days) in
complication cases than in noncomplication cases (t-test: \( P = 0.027 \)).

CONCLUSION: The results of this study acknowledge the clinical practice of subcutaneous administration of medication as a very flexible, broadly feasible, rather safe, and nonburdensome method. Nevertheless, this practice is not free from complications, needs appropriate nursing care, and requires standardized policies and procedures.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).