SUFENTANIL SUBLINGUAL TABLET SYSTEM (SSTS) IN POST-OPERATIVE PAIN:

A CASE SERIES

A. Mirasola¹, R. Perez¹, M. Ippolito¹, D.C. Fricano¹, M. G. Leone¹, G. Presti¹, C. Forzano¹, D. Canzio²

¹Section of Anaesthesia- Analgesia- Emergency- Intensive Care. Palermo University Medical Center- Italy. A. Giarratano, Full Professor

²Department of Surgical- Oncological and Oral Science Di.Chir.On.S., Palermo- Via del Vespro 129. 90127, Italy.

BACKGROUND AND AIM

SSTS is a preprogrammed, non invasive, patient-activated bed-side system for moderate-severe acute pain management in hospital settings. Our aim is to evaluate efficacy, ease of use of SSTS, patients and nurses satisfaction.

METHODS:

We evaluate pain control and general satisfaction in patients treated with SSTS after general or orthopedic prosthetic surgery. Enrollment started on April the 1st at Policlinico Paolo Giaccone in Palermo, and is still ongoing. SSTS allows patients to self-administer a 15- μ g sufentanil tablet sublingually with a 20-minute lockout, up to 72 hours. We visit patients three times per day, recording pain control (NRS scale), arterial blood pressure (NIBP), heart rate (hr), capillary oxygen saturation (SpO₂), need for rescue analgesic drugs, and any collateral effects. We also evaluate nurses and patients satisfaction using written questionnaires.

RESULTS:

We can provide preliminary data on a small number of patients (n=10), among which we found a good pain control, with 66% of patients having ≤ 4 points at NRS at 75% of the measurements. NIBP is 132/74 mmhg (average). Hr average is 68 bpm. SpO₂ is $> 90\%$, only one patient shows 87% due to his comorbidities. One patient needed rescue analgesic drug (ketorolac). Collateral effects is nausea, vomiting, asthenia and sleepiness. We also register a good satisfaction about SSTS, with 66% of patients giving the best evaluation to 82% of the surveyed items.

CONCLUSIONS:

Our preliminary results show that SSTS is an effective device for post-operative pain control, but further literature is required to confirm its role in post-surgical pain management.

References:

- Timothy I. Melson, David L. Boyer, Harold S. Minkowitz; Sufentanil Sublingual Tablet System vs. Intravenous Patient-Controlled Analgesia with Morphine for Postoperative Pain Control: A Randomized, Active-Comparator Trial; AcelRx Pharmaceuticals; 18 March 2014.
- Harold S Minkowitz; A review of sufentanil and the sufentanil sublingual tablet system for acute moderate to severe pain; Future Science Group; 2015
- P. Sacerdote, F. Coluzzi, A. Fanelli; Sufentanil Sublinguale, una nuova opportunità per migliorare il trattamento del dolore post-operatorio in Italia; European Review for Medical and Pharmacological Sciences; 2016;