Sufentanil sublingual tablet system in a multimodal post-operative pain management for Video-Assisted Thoracoscopic (VATS) lobectomy: a retrospective study.

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Argomento: Anestesia loco-regionale e analgesia

BACKGROUND: Sufentanil Sublingual Tablet System (SSTS; Zalviso, Grunenthal) is a relatively new, noninvasive, bedside patient-controlled system. The aim of our study is to retrospectively evaluate the effectiveness of SSTS in pain control at rest and on coughing of patients undergoing three-port video-assisted thoracoscopic (VATS) lobectomy compared to our standard analgesic protocol.

METHODS: Forty consecutive patients, who underwent pulmonary lobectomy at the Maggiore della Carità School of Medicine Hospital using a three-port approach, between November 2017 and April 2018, were retrospectively included and analyzed. In the recovery room (RR), after protocolized anesthesia and intercostal nerve block, SSTS group (n=20) received the first Sufentanil tablet, while Control group (n=20) received continuous infusion of Ketoprofen and a bolus of 1 gr of Paracetamol. We evaluated pain with a numeric rating scale (NRS) at rest and on coughing at discharge from RR and every 8 hours for 48 hours. Rescue analgesia and side effects were registered in both group while patient satisfaction only in SSTS group.

RESULTS: Intervention affected pain control at rest ($\chi2(1) = 7.789$, $p= 0.005$) and on coughing ($\chi2(1) = 19.203$, $p= 1.176e-05$), lowering on average NRS by respectively 0.69 ± 0.24 and 1.39 ± 0.29. Only in Control group, 7/20 patients (35%) required rescue analgesia ($p<0.01$). Nausea and vomiting occurred in 20% of SSTS patients. Analgesic protocol with SSTS was judged as “excellent” in 70% of patients (14/20).

CONCLUSION: After VATS lobectomy, multimodal analgesia with SSTS seems to be more effective than multimodal standard treatment in pain management.

Key words: Sufentanil sublingual, lobectomy, post-operative pain control