

Abstracts (Oral Presentation)

Comparative Effectiveness of Lidocaine Sprays Between Sitting and Supine Position for Patients Undergoing Upper Gastrointestinal Endoscopy: A Prospective Randomized Controlled Trial

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Abstract

Introduction: Topical pharyngeal anesthesia has improved esophagogastroduodenoscopy (EGD) efficiency with smooth insertion, reducing pain and discomfort. Lidocaine spray is one of the safe and widely used methods. In practice, the patients walk, sit in a wheelchair, or lie on a trolley bed, and the lidocaine sprays are applied to those in sitting or supine positions for pre-endoscopic preparation.

Objectives: This study aims to compare the effects of lidocaine sprays between sitting (Group A; Gp A) and supine positions (Group B; Gp B) for patients undergoing unsedated EGD.

Methods: This study was a single-center prospective randomized controlled trial. The lidocaine spray in the sitting or lidocaine in the supine position was allocated to unsedated EGD patients randomly.

Results: Lidocaine spray treatments were significantly different in the gag reflex (NRS; Gp A: 1.28 + 0.67, Gp B: 1 + 0.63, $P = .0003$), ease of esophageal instrumentation (NRS; Gp A: 7.68 + 0.91, Gp B: 7.95 + 0.66, $P = .0042$), and pain score (NRS; Gp A: 5.16 + 2.08, Gp B: 4.53 + 1.93, $P = .0059$). When considering modified Mallampati classification (MMC), MMC classes III and IV were significantly different in the same direction but MMC classes I and II were not.

Conclusions: The technique of spraying in the supine position was associated with less gagging, less pain, and easier esophageal instrumentation, especially in patients with MMC classes III and IV.

Keywords: Lidocaine spray, Esophagogastroduodenoscopy, Topical pharyngeal anesthesia, Sitting position, Supine position

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