Patient safety under sedation for Zygomatic implants

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Background

Sedation safety when is administered by non-anesthesiologists has traditionally raised controversy, usually disguised as scientificism when the real issue is mainly financial in nature.

Zygomatic implants have been documented as an alternative for the rehabilitation of the atrophic posterior maxillar. According to the original protocol, surgery was carried out under general anesthesia with nasal intubation (1).

Case Report

We report 73 cases of Zygomatic implants under local anesthesia and anesthesiologists' sedation. All patients were ASA 2-3. Standard monitoring included Noninvasive Blood Pressure (*NIBP*), Heart Rate (*HR*) and arterial oxygen saturation by pulse oximetry (*SpO2*).

Patient's level of sedation was assessed using the Ramsay Sedation Scale. We didn't have hypoxemia (*SpO2* <90%), hypotension (*SBP* <90 mm Hg), significant respiratory or hemodynamic incidences, no regurgitation or required ventilation support, and any failure to complete the procedure.

Discussion

In a non-systematic review regarding **sedation by non-anesthesiologists**, using databases, Google Scholar and expert opinions, we found a variable hypoxemia incidence (4-50%), although *SpO2* <90% seems less than 10% and severe hypoxemia (*SpO2* <85%) occurs in 0.25-0.62% of patients.

Arrhythmia occurs in 4-72%, and 4-42 % present electrocardiograph alterations (usually ST changes) (2,3).

Significant complications are reported in some studies in 50% of cases, including severe hypotension), significantly increased *ETCO2*, severe cough, and a need for ventilation support.

Complications were resolved properly, and no cardiorespiratory arrest or death was recorded, and authors concluded the deep sedation they performed was safe for patients and provided a wide margin of tolerance, comfort, and satisfaction.

Learning points: the underestimation or relativization of the complications found in many nonanesthesiologists publications demonstrates a lack of knowledge and/or indifference towards the most elementary safe practices for patients.

References

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