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Awake fiberoptic intubation: The role of Dexmedetomidine

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Abstract

Numerous guidelines have been developed to assist clinicians in case of difficult airway management. The estimated incidence of patients with difficult airway during clinical anesthesia is 1%–18%1 and up to 30% of all deaths and morbidities attributable to anesthesia are related to difficult airway management2. To avoid unfaithful events, awake fibreoptic intubation (AFOI) is nowadays the gold standard in predicted difficult airway management but, if conducted without sedation, it is common that this procedure may lead to high patient discomforts, such as coughing and laryngospasm in reaction to intubation, and serious hemodynamic responses due to catecholamines release.

The ideal drug to obtain sedation for AFOI should, therefore, be short-acting and easily titratable to obtain an adequate sedation level, with minimal effects on spontaneous ventilation.

DEX is an alpha$_2$-adrenergic agonist, comparable for its structure to clonidine but with a greater affinity, 8 to 10 times more selective, for alpha$_2$-receptors over alpha$_1$-receptors28. For its sedative, anxiolytic, analgesic and sympatholytic properties, DEX may be considered as a useful drug during awake intubation, reducing participants' discomfort, without depressing respiratory function and having a negligible impact on the cardiovascular system.

So that, the necessity to discuss and describe evidence supporting sedation by DEX to make the process more tolerable to patients, striking a balance between patient comfort, safety, co-operation and good intubating conditions in spontaneous breathing.

Biography

Aniello Alfieri currently works as resident doctor at the Department of Anesthesiological, Surgical and Emergency Sciences, University of Campania "Luigi Vanvitelli", Naples Italy. Aniello does research in Medical Technology, Intensive Care, Emergency Medicine, Anesthetics and Pain Management.

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