Conscious sedation in a psychiatric patient: A challenge

Sir,

We report a case of anesthetic management in a case of atrophic laryngitis, posted for thyroplasty. This case highlights the use of low dose haloperidol for conscious sedation in an uncooperative psychiatric patient.

Thyroplasty is a surgical intervention to improve voice quality and needs an uninstrumented larynx for functional assessment of vocal cords during the procedure. During thyroplasty cooperation from patient is required and conscious sedation is considered as a gold standard to provide appropriate balance of adequate pain control, airway protection, and alertness appropriate for vocal testing. Such a case poses an anesthetic challenge during the perioperative period due to sharing of the airway with the surgeon.

A 54-year-old male presented with complain of weak voice since last 5 years. The patient was diagnosed as a case of atrophic laryngitis and medialization thyroplasty was planned. The patient was a known case of bipolar affective disorder, with a history of various episodes of mania and aggression. He was prescribed tablet amisulpride 50 mg in once daily dose but was on irregular treatment. The patient was apparently asymptomatic therefore psychiatrist was not consulted preoperatively. He did not take the antipsychotic drug on the morning of surgery. In the operation theater, all routine monitors were attached to the patient. Fentanyl was given in a dose of 1 µg/kg and the surgical site infiltration was done with lignocaine. Dexmedetomidine was started at 1 µg/kg over 10 min followed by infusion in a dose of 0.5 µg/kg/h. Desired BIS value of 60-80 was achieved and Ramsay
sedation score of 3-5 was maintained. After about 15 min of starting the dexmedetomidine infusion, during the surgical procedure, the patient started delusional speech became aggressive with unprovoked body movements. Immediately, injection haloperidol was given in a dose of 0.1 mg/kg to suppress agitation. The patient’s involuntary movements were suppressed, his agitation settled, and rest of the surgery underwent uneventfully using dexmedetomidine infusion on an immobile, cooperative, and stable patient. Intraoperatively, all the parameter of the patient including electrocardiogram remained normal. Postoperatively, the patient remained comfortable and next day he was referred to Psychiatric Department for further management.

Conscious sedation is defined as a technique of administering sedatives or dissociative agents with or without analgesics to induce a state that allows the patient to tolerate unpleasant procedures while maintaining cardiorespiratory function.\(^{[1]}\) Commonly used drugs for conscious sedation are benzodiazepines, opioids, and propofol.\(^{[2]}\) Dexmedetomidine is a selective \(\alpha_2\)-receptor agonist with properties of analgesia, sympatholysis, and titrating sedation without any major respiratory depression. It has opioid-sparing effect and reduces stress response to surgery with a stable hemodynamics.\(^{[3]}\)

Acute psychiatric illness with agitation can presents with a dangerous, potentially life-threatening situation often requiring complex management. Various drugs used for sedation in agitated patients include haloperidol, lorazepam, olanzapine, and droperidol. Haloperidol is the drug of choice when aggressive behavior is the dominant feature and is commonly used for agitated patients in ICU.\(^{[4,5]}\) The role of haloperidol in prevention and treatment of nausea and vomiting is well known which provides an added advantage of its use in the perioperative period. Its use in an elderly patient is sometime associated with QT prolongation and heart failure so should be used with caution.

Dexmedetomidine sedation along with haloperidol produced hemodynamic and respiratory stability and preserved overall pharyngeal and laryngeal integrity for superior operating conditions for voice monitoring surgery. This case reminds that haloperidol can also be used along with other routine anesthetic drugs to sedate an agitated psychiatric patient. This case highlights the use of haloperidol as an adjuvant to dexmedetomidine intraoperatively to achieve adequate sedation levels in a condition where patient cooperation is needed.

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### Conflicts of interest
There are no conflicts of interest.

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