De-addiction: A new risk for anesthesia

Sir,

These days we encounter several patients of substance dependence for elective surgical procedures or in an emergency. These patients at that time may be either addicted to them or on de-addiction treatment. Physical addiction to any drug is a function of multiple neuroadaptations (tolerance, sensitization, and withdrawal) of the body to the effect of the drug.[1] Smokeless tobacco or finely ground tobacco (also called snuff), often consumed by placing it next to the gingival/buccal mucosa, is more common in rural than urban areas.[2] The amount of free nicotine available depends on the concentration of nicotine in the product and pH level of the product. With the increase in pH, the percentage of unionized nicotine increases, which is readily absorbed through the mucous membrane.[3] Just asking the patient to quit tobacco and not offering any alternative is stressful for the patients. Anesthesiologists must be skilled enough in establishing a good rapport with the patients to extract the history of the current or past addiction during preanesthetic visits.[4] In this case, the patient was already using fennel seeds as a substitute of tobacco chewing, but we failed to retrieve this information from the patient.

A 30-year-old male was posted for excision of transverse colon mesenteric cyst. All investigations were within normal limits, and airway examination did not reveal any difficulty. After confirming the fasting status and taking written informed consent, monitors were attached. The patient was premedicated with injection glycopyrrolate 0.2 mg intravenous (IV) and ondansetron 4 mg IV. Anesthesia was induced with injection propofol 2 mg/kg IV followed by injection succinylcholine 100 mg IV to facilitate endotracheal intubation by 8.0 mm cuffed endotracheal tube. Anesthesia was maintained with nitrous oxide in oxygen (2:1), isoflurane 1%, and intermittent boluses of injection vecuronium 1 mg IV, as needed. On completion of the surgery, neuromuscular blockade was reversed. The patient was breathing spontaneously with a good tidal volume, and oropharynx was suctioned. Extubation was performed under deep anesthesia to avoid coughing or straining on tracheal tube. Immediately after extubation, the patient's breathing appeared to be paradoxical, so 100% oxygen was given through mask. Suddenly, the patient became restless, and there was a fall in saturation. Small foreign particles were visualized on the inner surface of the transparent face mask. Immediately, thorough suction was done, and

Figure 1: Fennel seeds beneath upper lip

oropharynx was inspected using direct laryngoscopy. Small light green-colored particles (fennel seeds) were also found under the upper lip which were removed [Figure 1]. Recovery of the patient was uneventful after that, and the patient was shifted in fully conscious state in the recovery room. Further questioning regarding fennel seeds revealed that he used to keep something beneath his upper lip to kick the habit of tobacco chewing for the past 6 months. On further examination of his oral cavity, gingival erosion under his upper lip was noticed. It was a case of acute upper airway obstruction, but prevented from progress by prompt recognition. Had we not been vigilant, this could have progressed rapidly to life-threatening airway obstruction and aspiration pneumonia. During the preoperative visit, we encounter these patients at a unique teachable moment for behavioral change when they are eager to listen us. Communication skills should be improved for better patient outcome.[5] Although the patient was a reformed tobacco chewer, a careful de-addiction history along with thorough oral cavity examination would have revealed many things. Still, a strict vigilance after extubation in this case prevented many complications. We emphasize to do a complete oral cavity examination including under the surface of both the upper and lower lips along with a thorough history of fasting status and abstinence from addiction in tobacco addicts.

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Conflicts of interest

There are no conflicts of interest.

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