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LETTER TO THE EDITOR

UNCORRECTED PROOF

Intravenous fentanyl as a treatment of intraoperative hiccups- a case report

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To the Editor,

A hiccup is a sudden, involuntary spasmodic contraction of the diaphragm and external intercostal muscles, that results in inspiration which abruptly ends with closure of the glottis.[1,2] We report an interesting case of a patient who developed hiccups following spinal anaesthesia treated successfully with intravenous fentanyl.

A 34-year-old male was posted for arthroscopic anterior cruciate ligament reconstruction. History, physical examination and blood investigations were unremarkable. In the operative room standard monitors (ECG, NIBP, SpO_2) were applied and intravenous access with 18G iv cannula secured. Subarchnoid block was administered in the L4-L5 interspace with 3 ml of Inj. Levobupivacaine 0.5%. Level of block checked and sedation was given with 2 mg of Inj. Midazolam Patient developed hiccups 2 minutes later. Reassurance was unsuccessful. Inj. Midazolam 1 mg was given. There was no change in the frequency of hiccups. After 5 minutes patient c/o pain in the subscapular area. We administered 30 mcg of intravenous fentanyl. Frequency of hiccups reduced and completely stopped within 5 minutes. The remaining perioperative period was uneventful. There was no recurrence of hiccups later.

Clinically, most hiccup episodes begin with an acute onset, are benign, and are self-limited, typically ceasing within minutes.[3] However, the sudden onset of hiccups may become a safety hazard while patients are sedated. Acute hiccups can disturb the surgical field, might interfere with lung ventilation or could hamper diagnostic procedure.[4] Interestingly, drug-induced hiccups are reported more commonly in men than women[5] similar to our case.

Various drugs such as ketamine 25 mg IV, ephedrine 5 mg IV, atropine 0.5 mg IV and dexmedetomidine 50 g IV over 10 min have been used to manage intraoperative hiccups.[4,6] Although Benzodiazepines are well known precipitant of hiccups, intravenous midazolam has been successfully utilized in patient with terminal hiccups.[7] But in our case further dose of midazolam did not terminate hiccups. Though opioids also described as a cause of hiccups, in our case a small dose of intravenous fentanyl proved to be beneficial in terminating hiccups which has not been reported before.

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