Sir,
We read with interest the review article titled “Pain relief after ambulatory surgery: Progress over the last decade” by Jafra et al., in which the authors have covered in detail the drugs and modalities that can be used to facilitate early recovery and discharge after ambulatory surgery.[1] Reduced use of intraoperative opioids, reduced anesthetic consumption, and good pain relief are the mainstay of early recovery and successful discharge from hospital after ambulatory surgery. Undoubtedly, multimodal analgesia and peripheral nerve blocks are the cornerstone of this endeavor.

Lidocaine is an amide local anesthetic which is also classified as a class Ia antiarrhythmic agent. When used perioperatively, IV lidocaine has opioid sparing analgesic properties, antihyperalgesic, and anti-inflammatory properties. It has

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been used in a dose of 1.5 mg/kg IV followed by an infusion at the rate of 1–2 mg/kg/h (ideal body weight). The duration of infusion used has been variable in different studies ranging from stopping immediately after surgery to 24–72 h postoperatively. Patients with hepatic dysfunction are not suitable for the infusion as lidocaine is metabolized in liver and accumulation can lead to toxicities such as seizures. Perioperative lidocaine infusion in the dose described above has been found to be safe without adverse effects. The serum levels of lidocaine when used perioperatively has been found to be below cardiotoxic and neurotoxic levels.[2]

Perioperative IV lidocaine is useful in several ways. When used for minimally invasive laparoscopic surgeries, it reduces opioid consumption and facilitates early recovery of bowel function. The early return of bowel function also depends on the duration for which the infusion is used. Enhanced recovery after surgery (ERAS) protocol has also recommended the use of IV lidocaine during colorectal and gastrointestinal surgeries to reduce opioid use and for early recovery of bowel activity.[3] For breast surgeries, IV lidocaine is also known to reduce chronic post-mastectomy pain syndrome. Perioperative lidocaine also has anticancer properties, and has been shown to reduce cancer recurrence after major oncological surgeries. However, the exact dose and the duration of infusion has not been described yet. The systematic review by McCarthy et al. highlighted the advantages of perioperative lidocaine when used during laparoscopic abdominal and ambulatory surgeries. The benefits conferred were reduced intraoperative anesthetic and opioid use, lower postoperative pain score, early return of bowel function, and shorter hospital stay.[4] The results also mentioned that the benefits were not obvious after tonsillectomies, orthopedic, and cardiac surgeries. Contrary to this, Weibel et al. reviewed 68 trials in which IV lidocaine was used perioperatively for a varying duration and found no clinically relevant effect on pain scores later than 24 h. However the authors felt that all studies included in the meta-analysis had a smaller sample size, and therefore larger trials can throw light on its efficacy when a meta-analysis is performed.[5]

We feel perioperative IV lidocaine is a safe, cost-effective addition to the armamentarium of multimodal analgesia and can be used safely to facilitate early recovery and discharge from hospital after ambulatory surgery.

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Conflicts of interest
There are no conflicts of interest.

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