Intravenous lignocaine for treatment of refractory ileus following spinal cord injury

Sir,

Gastrointestinal (GI) motility disturbances can be one of the major causes of patient discomfort in the intensive care unit (ICU) and are also associated with increased rate of ventilator associated pneumonia, infections, the risk of bacterial translocation, and the inability to be fed.^[1] Here we have highlighted the management of refractory ileus after spinal cord injury.

A 30-year-old male (54 kg) presented with traumatic spinal cord injury at T7-T8 level. After a corrective spine surgery the patient was shifted to the ICU for further management. During ICU stay, the patient had ileus which precluded starting of early enteral nutrition. All the laboratory investigations and ultrasononography of whole abdomen were normal. All the possible causes of ileus included fluid and electrolyte imbalance, drugs promoting ileus and mechanical gut obstruction were excluded. On day three, we decided to start treatment with IV lignocaine infusion in our patient. Intravenous lignocaine (1 mg/kg) followed by 1-4 mg/min was administered to the patient. After 26 h of infusion, signs of bowel motility (passage of

stool and flatulence) were apparent and the lignocaine infusion was stopped and enteral nutrition was started. The patient had an uneventful stay in the ICU thereafter and was discharged from the ICU.

Ileus following acute spinal cord injury is a known entity. Partial disruption of afferent and efferent spinal cord innervations and stress response to trauma or surgical management are the important causes of ileus following spinal cord injury. Lidocaine may improve smooth muscle contractility and basic cell function by cellular repair mechanisms which are still unknown.^[2] Neostigmine has been suggested as one of the therapeutic modality for refractory ileus in spinal cord injured patient.^[3] However, we did not use neostigmine for the treatment of ileus in our patient as there was chance of deleterious effects of neostigmine in spinal cord injured patients who may be prone to autonomic disturbance and bradycardia.^[4]

In conclusion, lignocaine can be an important therapeutic option in case of refractory ileus following spinal cord injury and should be started to reduce the overall morbidity.

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