Letter to Editor

Management of troublesome Intrathecal fentanyl induced pruritis.

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Sir,

Combination of intrathecal local analgesic and opioid are commonly used for neuraxial blocks. This combination gives excellent intraoperative as well as postoperative analgesia. Pruritus is a troublesome side-effect of intrathecal opioids. Sometimes it may be more unpleasant than pain itself. We would like to share our experience in a 58 years old ASA-II female weight 62 kg a case of intertrochanteric fracture femur right side posted for open reduction and internal fixation under subarachanoid block received 3 ml (15 mg bupivacaine) and 25 µg fentanyl mixture for procedure and post operative pain relief.¹

Spinal needle 25G quincke needle was used to give spinal anaesthesia in sitting position in mid line. After free flow of cerebrospinal fluid, 0.5% bupivacaine (heavy) 3 ml and 25 µg fentanyl was injected in the L3-L4 subarachnoid space. 90 minutes after sub arachanoid block patient began to complain of itching all over the body. Injection hydrocortisone succinate 200 mg IV was given. Patient maintained all the vitals within normal limit during the procedure and she was shifted to ward for close monitoring.

Next day in the morning at 0300 hrs patient developed tachypnea (RR-35-40/min) and tachycardia (HR-140-160/min). Blood pressure was 146/96 mmHg and maintaining Spo2 at 92% with oxygen 8L/min. Patient complained of generalised pruritis without any rashes. In spite of giving injections of hydrocortisone, pheniramine and propofol, pruritis did not subside. In view of continuing pruritis, infusion naloxone was started at rate of $0.5\mu g/kg/hr$. After 4 hours, patient was comfortable and maintaining all vitals within normal limit. Rest of the post-operative period was uneventful and patient was highly satisfied with the relief of generalised pruritis. We have used infusion of naloxone at 0.25 to 1 $\mu g/kg / h$ is the most efficient for controlling pruritis.²⁻⁴

It shows that low dose of intravenous naloxone is very effective in reversing the pruritis due to intrathecal administration of fentanyl without affecting the analgesia.

A large variety of drugs has been evaluated in the treatment of fentanyl induced pruritus.^{5,6} Among them, many drugs are including antihistamines, 5-hydroxytryptamine 3-receptor antagonists, opiate-antagonist, propofol, non-steroidal antiinflammatory drugs (NSAIDs), and droperidol. In conclusion, naloxone is an effectively therapeutic strategy to prevent opioid-induced side effects, such as pruritus in low dose without affecting the analgesia.

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