

Spinal anesthesia with chlorprocaine and ESP block is a valid alternative for ambulatory open inguinal hernia repair

Dear Editor,

Ambulatory surgery for open inguinal hernia repair is now a common practice, does not require hospitalization of the patient, and allows rapid discharge home.^[1]

In this setting, the surgery is usually performed under local anesthesia (LA) and light sedation,^[2] as general or subarachnoid anesthesia (SA) results in slower patient recovery with generally longer discharge times.

However, the choice of anesthesia technique must be shared with the patient.

In this regard, we describe the case of a 57-year-old patient undergoing open inguinal hernia repair in day surgery.

The patient, with no other comorbidities and a history of previous airway management difficulties, refused to perform the procedure under LA due to a previous negative experience with this technique.

General anesthesia would have increased perioperative risks related to airway management and prolonged hospitalization, so we opted for short-acting SA using chlorprocaine and unilateral erector spinae plane (ESP) block to provide postoperative analgesia.

Therefore, after the patient signed the informed consent, she was placed in a sitting position and SA was performed at the L2–L3 level using a 27-Gauge Whitacre needle injecting 40 mg of chlorprocaine. Subsequently, the unilateral ESP block was performed with 20 mL of 0.5% ropivacaine at the T8 level using a 5–13 MHz high-frequency linear probe [Figure 1].

The onset of the sensitive block, assessed by the ice test, was approximately 2.5 min, extending from T4 to S3 dermatomes.

Vitals were monitored throughout the procedure and were found to remain stable at all times. The surgery lasted 40 min, and no intraoperative pain or adverse events occurred.

Multimodal analgesia was given through intravenous administration of acetaminophen 1 g and ketorolac 30 mg.

After surgery, using the ice test and Bromage scale, we observed a complete regression of motor block (in 55 min

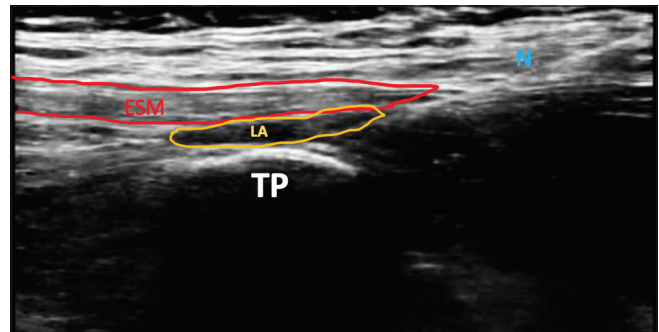


Figure 1: ESP block at the T8 level. Note the needle tip located between TP and the ESM with injection of LA, resulting in elevation of the muscle. ESM = erector spine muscle, ESP = erector spinae plane, LA = local anesthetic; N = needle, TP = transverse process

after performing SA) and sensory block (after 67 min). The patient did not have postoperative urinary retention.

The patient was discharged from the hospital 3 h after the end of surgery without pain (Numeric Rating Scale [NRS]- 0) and was given instructions to record pain intensity at 6–12–24 and 48 h after surgery. At subsequent follow-up, she reported that the NRS was always 0, both at rest and in motion.

Numerous papers have described the use of other short-acting local anesthetics, such as prilocaine, in day surgery, although they can sometimes require more than 3 h for complete regression of motor and sensory blockade,^[3] resulting in increased hospitalization times and, sometimes, the need for ordinary hospitalization.

Chlorprocaine is a new ultra-short-acting drug that has proven largely effective for management of short-term procedures with reliable resolution of motor block in less than 2 h.^[4]

The combination of spinal anesthesia (with bupivacaine) and ESP block for open inguinal hernia repair has already been shown to have excellent postoperative analgesia in an inpatient setting.^[5]

However, the combination of spinal anesthesia with chlorprocaine and ESP block for open inguinal hernia repair is a safe and viable alternative to LA or general anesthesia in an ambulatory surgery setting.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her

consent for her clinical information to be reported in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

**MARCO GIUDICE, RICCARDO PULITANÒ,
ENRICO DI SABATINO, FRANCESCA LA VERDE¹**

Unit of Anesthesia, Intensive Care and Pain Management,
Azienda Ospedaliera San Giovanni Addolorata, Rome,

¹Department of Medicine, Unit of Anesthesia, Intensive Care
and Pain Management, Campus Bio-Medico University, Rome,
Italy

Address for correspondence:


Dr. Riccardo Pulitanò,
Luca Valerio 69 Street, Rome 00146, Italy.
E-mail: rpulitano@hsangiovanni.roma.it

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