Erector spinae plain (ESP) block catheter for video-assisted thoracoscopic surgery (VATS) lobectomy: case series of seven patients

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INTRODUCTION

ESP has been recently described as a novel regional technique for analgesia after thoracic surgery. We report our experience with the insertion of ESP catheters for VATS lobectomy as an alternative to thoracic epidural block and thoracic paravertebral block.

CASES

ESP block was performed in a cohort of 7 patients (3 women and 4 men between 62 and 76 years old) who underwent VATS lobectomy after the induction of general anaesthesia.

ESP BLOCK

- Lateral decubitus position
- Eco-guided technique
- 13-6 MHz probe
- Puncture at T5-T7 level with Tuohy 18G needle to cranio-caudal direction
- Local anaesthetic bolus: (30ml mepivacaine 1% + levobupivacaine 0.25%)
- Catheter inserted 5-6 cm into the ESP space

PAIN MANAGEMENT

All patients received dexketoprofen 50 mg and paracetamol 1g during the procedure and then alternately during 3 days. A continuous infusion of L-bupivacaine 0,125% at 8-9ml/h through ESP catheter was initiated on PACU.

<table>
<thead>
<tr>
<th></th>
<th>PACU1</th>
<th>24h</th>
<th>48h</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAS² &lt;3</td>
<td>58%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Analgesia</td>
<td>2/7 Metamizol 2g</td>
<td>Non required</td>
<td>Non required</td>
</tr>
<tr>
<td>requested</td>
<td>2/7 Tramadol 75mg</td>
<td></td>
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<tr>
<td>Morphine</td>
<td>28%</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td>requested</td>
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1PACU: Post Anaesthesia Care Unit  
²VAS: Visual Analog Scale of pain

CONCLUSIONS

- ESP block seems to be a safe, easy and effective technique.
- Adding a catheter for continuous infusion of local anaesthetic could be a good alternative for painful surgeries like VATS lobectomy.
- Further studies comparing different regional anesthesia techniques are needed.

REFERENCES