Background and Aims Ropivacaine is suggested to have an improved safety profile over bupivacaine in terms of cardio-toxicity and CNS toxicity.

We aimed to study the spinal block characteristics and hemodynamics between commercially available preparation of 0.75% hyperbaric ropivacaine and 0.5% hyperbaric bupivacaine in caesarean section.

Methods This prospective, randomized, double-blinded study was approved by the Institute ethics committee. Following exclusion, 64 term parturients were randomised to receive 0.75% hyperbaric ropivacaine 2 ml (15mg) (commercially available Ropin Heavy, Neon) or 0.5% hyperbaric bupivacaine 2 ml (10mg) (commercially available Anawin Heavy, Neon), with additive fentanyl 10 micrograms in both groups. Our primary objective was to evaluate duration of sensory block. Secondary objectives were to compare the hemodynamics and vasopressor usage, onset of sensory and motor blockage, duration of motor blockade, quality of anesthesia, complications and APGAR score.

Results Two segment sensory regression and motor blockade regression was faster in ropivacaine than bupivacaine (p=0.0005, 0.0005). The onset of sensory block to T6 and T4 and complete motor block was slower in ropivacaine (p=0.02, 0.07, 0.0005 respectively). The mean arterial pressure was significantly higher throughout all time intervals in ropivacaine than bupivacaine and vasopressor usage was lesser in Ropivacaine. The intraoperative quality of anesthesia was adequate in both groups. The APGAR scores remained high and side effects did not differ between groups.

Conclusions 0.75% Ropivacaine can be a suitable alternative to 0.5% Bupivacaine in patients undergoing caesarean section under spinal anesthesia with a benefit of early sensory and motor recovery, and better intraoperative hemodynamic profile without significant adverse effects.

Background and Aims The circadian rhythm plays a significant role in affecting the pharmacological properties of many anesthetic agents. The aim of this study was to investigate the effect the circadian rhythm may have on the duration of spinal anesthesia for parturient patients undergoing fetal delivery by caesarian section.

Methods In the present study, which was approved by our hospital scientific/ethics committee, ref. number: 35/4th/7298/18-5-2017, ninety parturient patients, ASA I-II, presented for caesarean section, urgent and/or elective, under spinal anaesthesia, were assigned to three equal groups, A (morning/afternoon group), B (evening group), C (night group), which were monitored for 8 hours, according to the time-point of the intrathecal drug administration. The same levobupivacaine and fentanyl dose was given to all patients. Pinprick or cold test, the four-point modified Bromage scale (0–3), and the numerical scale (NRS 0–10) were used respectively for the assessment of sensory and motor blockade, and post-anesthetic pain. The duration of sensory and motor blockade, the time of study drug administration to first postoperative analgesic request and pain score at first analgesic request were recorded.

Results We observed prolonged duration of motor blockade, sensory blockage and time of study drug administration to first postoperative analgesic request in group A compared to groups B (p<0.001) and C (p<0.001). Higher pain scores at first postoperative analgesic request were observed in group C compared to groups A (p<0.001) and B (p<0.001).

Conclusions We assume that time-point of intrathecal drug administration contributes to analgesia’s duration and that the intensity of postoperative pain at first analgesic request is partially related to circadian conditions.

Abstract B422 Table 1

<table>
<thead>
<tr>
<th>Time acquired</th>
<th>Ropivacaine (n=32)</th>
<th>Bupivacaine (n=32)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time taken to achieve T6 level</td>
<td>1.8±0.8</td>
<td>1.2±0.5</td>
<td>0.002</td>
</tr>
<tr>
<td>Time taken to achieve T4 level</td>
<td>2.6±1.3</td>
<td>1.8±0.8</td>
<td>0.007</td>
</tr>
<tr>
<td>Time taken for onset of complete motor paralysis Modified Bromage 3</td>
<td>3.8±1.0</td>
<td>1.3±0.8</td>
<td>0.005</td>
</tr>
<tr>
<td>Time for sensory blockade to regress two segments</td>
<td>84±24</td>
<td>108±12</td>
<td>0.005</td>
</tr>
<tr>
<td>Time for return of motor block Modified Bromage 0</td>
<td>126±36</td>
<td>222±30</td>
<td>0.005</td>
</tr>
<tr>
<td>Total vasopressor Ephedrine given (mg)</td>
<td>5.8±2.6</td>
<td>7.8±2.6</td>
<td>0.076</td>
</tr>
</tbody>
</table>

Data are means±SD. Statistically significant changes are shown in bold. P<0.05 is considered significant.

Discussion We assume that time-point of intrathecal drug administration contributes to analgesia’s duration and that the intensity of postoperative pain at first analgesic request is partially related to circadian conditions.

CIRCADIAN EFFECT ON SPINAL ANAESTHESIA FOR CAESARIAN SECTION

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LOW DOSE PETHIDINE VS ROPIVACAINE AND FENTANYL FOR SUBARACHNOID ANAESTHESIA IN UROLOGICAL OPERATIONS

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Background and Aims The ideal agent for subarachnoid anesthesia is still a matter of research. Subarachnoid administration of pethidine hydrochloride has been successfully administered (dose of 1mg/kg [1]). This study aims to assess the efficacy of low dose of pethidine hydrochloride (0.4mg/kg [2]) compared to administration of ropivacaine and fentanyl which is nowadays the common practice.

Ethical approval has been granted by the ethics committee.

Methods Patients undergoing transurethral resection of bladder tumor were blindly randomly allocated into 2 groups. Group I patients received low dose of pethidine hydrochloride (0.4mg/kg) and Group II patients received 15mg ofropivacaine with 15 mcg of fentanyl. Catheter-related bladder discomfort (CRBD) was evaluated.

Results 101 patients were enrolled in the study. There was no difference between the demographic profile and duration of operation between the groups (p >0.05). There was a difference regarding the motor block which was present only in 10,2%