

## INTISARI

**Latar belakang:** Anestesi spinal dengan bupivacaine dosis rendah populer pada brakiterapi. Levobupivacaine merupakan S-enantiomer bupivacaine, memiliki efek serupa tapi kurang kardi toksik dibanding bupivacaine. Penelitian ini bertujuan mengetahui efektivitas blok sensorik, motorik, pemulihan dan kejadian hipotensi kelompok levobupivacaine 7,5 mg dibanding levobupivacaine 10 mg.

**Metode:** Studi prospektif acak tersamar tunggal, kriteria inklusi: ASA I-II, TB 140-165 cm, 18-65 tahun, BMI < 30 kg/m<sup>2</sup>, kriteria eksklusi: kelainan *spine*, kriteria *drop out* : gagal SAB. Sebanyak 115 sampel dilakukan randomisasi, dibagi 2: Kelompok levobupivacaine isobarik 0,5% 7,5 mg dan kelompok levobupivacaine isobarik 0,5% 10 mg. Dilakukan pengukuran blok sensorik, motorik, hemodinamik tiap 5 menit pada 30 menit pertama, selanjutnya dilakukan pengukuran blok sensorik dan motorik tiap 15 menit sampai terjadi resolusi sensorik dan skor bromage 0.

**Hasil:** Ketinggian sensorik kelompok levobupivacaine 7,5 mg dan levobupivacaine 10 mg sebagian besar mencapai T10 (69% dan 75,4%) tidak berbeda bermakna secara statistik ( $p:0,430$ ), onset sensorik kelompok levobupivacaine 7,5 mg lebih lama dari levobupivacaine 10 mg ( $18 \pm 16$  menit dan  $15 \pm 20$  menit) berbeda bermakna secara statistik ( $p:0,009$ ) tapi secara klinis tidak bermakna, durasi sensorik kelompok levobupivacaine 7,5 mg lebih cepat dibanding kelompok levobupivacaine 10 mg ( $128 \pm 26$  menit dan  $152 \pm 39$  menit) bermakna secara statistik ( $p:0,005$ ), pemulihan kelompok levobupivacaine 7,5 mg lebih cepat dibanding kelompok levobupivacaine 10 mg ( $107 \pm 28$  menit dan  $148 \pm 24$  menit) berbeda bermakna secara statistik ( $p:0,000$ ). Kedua kelompok durasi sensorik dan motoriknya mencukupi durasi brakiterapi ( $97 \pm 39$  menit), tidak ada hipotensi. Brakiterapi intrakaviter berjalan baik dengan ketinggian blok sensorik < T10 dan skor bromage < 2.

**Kesimpulan:** Anestesi spinal kelompok levobupivacaine 7,5 mg sama efektif dibanding kelompok levobupivacaine 10 mg untuk pasien kanker serviks yang menjalani brakiterapi intrakaviter.

**Kata kunci :** Brakiterapi intrakaviter, kanker serviks, anestesi spinal, levobupivacaine isobaric.

## ABSTRACT

**Background:** Spinal anaesthesia with low dose bupivacaine is popular in brachytherapy. Levobupivacaine is an S-enantiomer of bupivacaine, has a similar effect but less cardiotoxic than bupivacaine. The aim of this study was to evaluate the effectiveness of 7,5 mg levobupivacaine compared with 10 mg levobupivacaine in terms of sensory block, motor, recovery and the incidence of hypotension.

**Methods:** A prospective, randomized, single-blinded study, inclusion criteria: ASA I-II, 140-165 cm of height, 18-65 years, BMI <30 kg/m<sup>2</sup>, exclusion criteria: spine abnormalities, drop out criteria: failed SAB. One hundred fifteen samples were randomized and divided into 2 groups: 0,5% isobaric levobupivacaine 7,5 mg and 10 mg. Sensory block, motor block, hemodynamics were evaluated every 5 minutes in the first 30 minutes then sensory block and motor block were evaluated every 15 minutes until sensory resolution and bromage score 0.

**Results:** Sensory height of 7.5 mg levobupivacaine and 10 mg levobupivacaine groups reached T10 (69% and 75.4%) were not statistically significant ( $p: 0.430$ ), the onset of 7.5 mg levobupivacaine group was longer than 10 mg levobupivacaine group ( $18 \pm 16$  menit dan  $15 \pm 20$  menit) statistically significant ( $p: 0.009$ ) but clinically was not significant, Sensory duration of 7.5 mg levobupivacaine group was faster than 10 mg levobupivacaine group ( $128 \pm 26$  and  $152 \pm 39$  minutes) statistically significant ( $p: 0.005$ ), Recovery of 7.5 mg levobupivacaine group was faster than 10 mg levobupivacaine group ( $107 \pm 28$  minutes and  $148 \pm 24$  minutes) statistically significant ( $p: 0.000$ ). Both groups, sensory and motoric duration were sufficient for duration of brachytherapy ( $97 \pm 39$  minutes). Both groups had no hypotension. Intracavitary brachytherapy worked well with sensory block height <T10 and bromage score <2.

**Conclusion:** Spinal anesthesia with levobupivacaine 7.5 mg group was as effective as 10 mg levobupivacaine group for cervical cancer patients underwent intracavitary brachytherapy.

**Key words:** Intracavitary brachytherapy, cervical cancer, spinal anesthesia, low-dose isobaric levobupivacaine.