

ABSTRAK

Latar Belakang: Insidensi kanker servix atau leher rahim di Indonesia masih tinggi. Setiap hari diperkirakan muncul 40-45 kasus baru dan sekitar 20-25 perempuan meninggal karena kanker serviks. Brakiterapi merupakan salah satu metode pengobatan pada kanker serviks. Analgesia dan imobilisasi diperlukan untuk mendapatkan letak yang optimal karena penyisipan aplikator dan insersi jarum selama brakiterapi serviks akan menyebabkan rasa nyeri dan tertekan. Anestesi intravena maupun anestesi spinal merupakan teknik anestesi yang efektif untuk prosedur brakiterapi karsinoma servix.

Tujuan: Penelitian ini bertujuan membandingkan efektivitas biaya antara anestesi spinal bupivacaine 0,5% 10mg dengan anestesi intravena kombinasi midazolam, fentanyl, propofol pada brakiterapi karsinoma servix.

Metode Penelitian: Rancangan penelitian dengan uji klinis acak terkontrol atau *randomized controlled trial* (RCT), melibatkan 48 pasien yang menjalani prosedur brakiterapi karsinoma servix. Subyek dibagi melalui randomisasi menjadi dua kelompok yaitu 24 subyek kelompok A (anestesi spinal bupivacaine 10mg) dan 24 subyek kelompok B (anestesi intravena midazolam, fentanyl, propofol). Dilakukan pencatatan biaya, hemodinamik, komplikasi, dan waktu pemulihan.

Hasil Penelitian: Rerata biaya anestesi SAB Rp 224.370 $\pm$ 14.535, TIVA Rp 173.480 $\pm$ 15.509 ($p < 0,05$). Komplikasi SAB 3, TIVA 4 ($p > 0,05$). Efektivitas SAB 21 (87%), TIVA 20 (83%) ($p > 0,05$). Durasi pemulihan kelompok SAB 92 menit, TIVA 21 menit ($p < 0,05$). Biaya / efektivitas SAB Rp 2.564, TIVA Rp 2.081.

Kesimpulan: Anestesi intravena kombinasi midazolam, fentanyl, propofol lebih efektif biaya daripada anestesi spinal bupivacaine 0,5% 10 mg pada brakiterapi karsinoma servix. Anestesi spinal dapat menjadi salah satu alternatif teknik anestesi pada brakiterapi yang berdurasi lama.

Kata Kunci: karsinoma servix, brakiterapi, anestesi, efektivitas biaya

ABSTRACT

Background: The incidence of cervix uterine cancer in Indonesia is high. Every day it is estimated that there are 40-45 new cases and about 20-25 women die because of cervix uterine cancer. Brachytherapy is one of treatment method for cervix uterine cancer. Analgesia and immobilization are required to obtain optimal positioning because insertion of the applicator and needle insertion during cervical brachytherapy will cause pain and pressure. Both intravenous anesthesia and spinal anesthesia are effective anesthetic techniques for brachytherapy cervix uterine carcinoma procedure.

Objective: To compare a cost-effectiveness analysis of spinal anesthesia versus intravenous anesthesia for brachytherapy cervix uterine carcinoma procedure.

Methods: Study design was randomized controlled trial with 48 patients who underwent brachytherapy of cervix uterine procedure. Subjects were divided with randomization into two groups which is 24 subjects in group A (spinal anesthesia bupivacaine 10mg) and 24 subjects in group B (intravenous anesthesia midazolam, fentanyl propofol). Cost, hemodynamics, complications, and recovery time were recorded.

Results: The average anesthesia cost of SAB was Rp 224,370 $\pm$ 14.535, TIVA was Rp 173,480 $\pm$ 15.509 ($p < 0.05$). Complications of SAB 3, TIVA 4 ($p > 0.05$). Effectiveness of SAB 21 (87%), TIVA 20 (83%) ($p > 0.05$). The recovery duration of the SAB group was 92 minutes, TIVA was 21 minutes ($p < 0.05$). The cost / effectiveness of SAB is Rp 2,564, TIVA Rp 2,081.

Conclusion: Intravenous anesthetic combination of midazolam, fentanyl, propofol is more cost effective than spinal anesthesia 0.5% 10 mg of bupivacaine for brachytherapy of cervix uterine carcinoma. Spinal anesthesia can be an alternative technique of anesthesia in long duration brachytherapy.

Keywords: cervix uterine carcinoma, brachytherapy, anesthesia, cost effectiveness