

## INTISARI

**Latar Belakang.** Operasi sesar menghasilkan nyeri pasca operasi yang signifikan. Tidak ada teknik standar pengelolaan nyeri pasca operasi sesar. Obat antiinflamasi nonsteroid seperti natrium diklofenak berkerja meng-inhibisi sintesis prostaglandin (PG) dengan menghambat enzim cyclooxygenase. Tramadol dengan aktivitas mu-agonis, tidak hanya bekerja pada reseptor opioid, tetapi juga menghambat serotonin (5-HT) dan *reuptake* noradrenalin.

**Tujuan.** Mengetahui daya guna analgesi 24 jam pasca operasi sesar antara penggunaan suppositoria rektal tramadol dengan natrium diklofenak

**Metode.** Prospektif, uji klinis acak terkontrol pada 70 pasien status fisik ASA I-II, berusia 19-40 tahun, hamil aterm 37-42 minggu, Indeks Massa Tubuh  $< 35 \text{ kg/m}^2$ . Pasien dikelompokkan acak ke dalam 2 kelompok : kelompok suppositoria rektal natrium diklofenak (D) dan tramadol (T) dengan teknik *single blind*. Dilakukan penilaian VAS pada kedua kelompok, jumlah penambahan *rescue* jika  $\text{VAS} \geq 3$ , dan efek samping pada masing-masing kelompok.

**Hasil.** Selama 24 jam pasca operasi, rata-rata frekuensi pemberian tambahan fentanyl kelompok T sebanyak 3.13 kali dan kelompok D 1,7 kali, rata-rata dosis tambahan fentanyl kelompok T sebanyak 155,71 mcg dan kelompok D 67,65 mcg ( $p=0,000$ ). Rata-rata VAS 24 jam pasca operasi pada kelompok T 2,14 dan pada kelompok D 1,74 ( $p<0,05$ ). Untuk efek samping, kelompok T terdapat 4 kejadian (11,4%) mual muntah, sedangkan pada kelompok D tidak ada. Perbedaan ini bermakna yang ditunjukkan dengan nilai  $p=0,042$  ( $p<0,05$ ).

**Kesimpulan.** Daya guna analgesi natrium diklofenak 100 mg suppositoria rektal lebih baik dibanding tramadol 100 mg suppositoria rektal, dengan efek samping yang lebih kecil pada 24 jam pasca operasi sesar.

**Kata Kunci.** Natrium Diklofenak, Tramadol, Suppositoria Rektal, Daya Guna Analgesi, Pasca Operasi Sesar

## ***ABSTRACT***

**Background.** Cesarean section inflicts significant postoperative pain. There is no standard technique for pain management after cesarean section. Non-steroidal anti-inflammatory drugs, for example diclofenac sodium, work to inhibit the prostaglandin (PG) synthesis, by obstructing the cyclooxygenase enzyme. Tramadol alongside mu-agonist activity, does not only act on opioid receptors, but also inhibits serotonin (5-HT) and noradrenaline reuptake.

**Objective.** To determine the efficacy of 24-hour postoperative cesarean section between of rectal suppositori tramadol and diclofenac sodium.

**Methods.** Prospective, randomized controlled clinical trial to 70 patients with ASA I-II physical status, aged 19-40 years old, pregnancy aterm 37-42 weeks, Body Mass Index <35 kg / m<sup>2</sup>. The patients were randomly assigned into 2 groups: rectal diclofenac sodium suppository (D) and tramadol (T) groups using single blind technique. VAS assessment was performed in both groups. The amount of rescue was added if the VAS  $\geq 3$ , and there were side effects in each group.

**Results.** During the 24 hour postoperative period, the mean frequency of supplemental fentanyl to group T was 3.13 times, and group D was 1.7 times. The mean additional dose of fentanyl group T was 155.71 mcg, and group D was 67.65 mcg ( $p = 0.000$ ). The average VAS was 24 hours postoperative in the T group of 2.14, and 1.74 in the D group ( $p < 0.05$ ). For the side effects, T group had 4 occurrences (11.4%) nausea vomiting, and zero in group D. This difference was significant, as indicated by the  $p$  value = 0.042 ( $p < 0.05$ ).

**Conclusion.** The efficacy of 100 mg diclofenac sodium analgesia of rectal suppository is better than 100 mg tramadol rectal suppository, with smaller side effects within 24 hours after surgery.

**Keywords :** Sodium Diclofenac, Tramadol, Rectal Suppository, Analgesia Efficacy, Post-Cesarean Section