

INTISARI

Odontektomi adalah pengeluaran gigi secara pembedahan dengan membuat flap mukoperiosteal dan pengurangan tulang rahang. Tindakan ini bisa menyebabkan cedera dan rusaknya jaringan lunak dan keras, dan menimbulkan respon inflamasi yang menghasilkan pelepasan sitokin proinflamasi, salah satunya TNF- α , sehingga menyebabkan munculnya nyeri, edema wajah dan trismus. Penelitian ini bertujuan mengetahui pengaruh pemberian obat meloksikam 15 mg peroral, 60 menit praodontektomi terhadap nyeri, edema wajah, trismus dan ekspresi TNF- α pascaodontektomi gigi molar tiga mandibula.

Rancangan penelitian dengan *double blind randomized control trial*, menggunakan 24 pasien, yang akan dilakukan odontektomi molar tiga mandibula, pada Poliklinik Bedah Mulut RSGM UGM Prof. Soedomo, sesuai dengan kriteria inklusi yang ditetapkan, dibagi menjadi dua kelompok yakni kelompok meloksikam (12 orang) dan kelompok kontrol (12 orang). Pengamatan terhadap nyeri (dilihat dari nilai VAS), edema wajah (dilihat dari pembengkakan pipi), trismus (dilihat dari kemampuan membuka mulut) dan ekspresi TNF- α (diukur dari saliva dengan uji ELISA) pascaodontektomi dilakukan pada praodontektomi, H+1 (24 jam pascaodontektomi) dan H+3 (72 jam pascaodontektomi).

Hasil penelitian menunjukkan pasien yang menerima meloksikam peroral 15 mg praodontektomi memiliki nyeri pascaodontektomi yang lebih rendah ($p=0,000$), edema wajah yang lebih kecil ($p=0,000$) dan ekspresi TNF- α yang lebih rendah ($p=0,000$) dibandingkan dengan pasien yang menerima plasebo. Tidak terdapat perbedaan bukaan mulut pada kelompok meloksikam dan kelompok plasebo ($p=0,522$). Semakin tinggi kadar TNF- α maka semakin tinggi skor nyeri, semakin besar edema wajah dan semakin kecil bukaan mulutnya.

Pemberian meloksikam 15 mg peroral 60 menit praodontektomi lebih efektif mengurangi nyeri, edema wajah dan ekspresi TNF- α pascaodontektomi molar tiga mandibula dibandingkan dengan plasebo.

Kata kunci : meloksikam, praodontektomi, nyeri, edema wajah, trismus, ekspresi TNF- α

ABSTRACT

Odontectomy is surgical removal of tooth by making a mucoperiosteal flap and reduction of the jawbone. This procedure could cause injury and damage to soft and hard tissues, and cause an inflammatory response that results in the release of proinflammatory cytokines, one of which is TNF- α , thus causing the appearance of pain, facial edema and trismus. This study aimed to evaluate the effects of 15 mg meloxicam administered 60 minutes before odontectomy on pain, facial edema, trismus and expressions of TNF- α after odontectomy of impacted mandibular third molar.

This research was conducted with a double blind randomized control trial method. A total of 24 patients were randomized into treatment groups, each with 12 patients: Group A was administered with 15 mg of meloxicam; and Group B with placebo. Drugs were administered orally 60 minutes prior to surgery. Observation of pain (seen from VAS scores), facial edema (seen from swollen cheeks), trismus (seen from mouth opening) and expressions of TNF- α (measured from saliva by ELISA method), performed before odontectomy, H+1 (24 hours after odontectomy) and H+3 (72 hours after odontectomy).

The results of this study showed patients who received 15 mg meloxicam 60 minutes before odontectomy showed less postoperative pain ($p=0.000$), less facial edema ($p=0.000$) and lower expressions of TNF- α ($p=0.000$). No differences were found in mouth opening between the meloxicam group and placebo group ($p=0.522$). The higher level of TNF- α level will lead to higher level of pain, greater facial edema and causes smaller mouth opening.

Oral administration of 15 mg meloxicam 60 minutes prior to odontectomy was found more effective in reducing pain, facial edema and expressions of TNF- α after odontectomy of impacted mandibular third molar compared with placebo.

Keywords: meloxicam, preodontectomy, pain, facial edema, trismus, TNF- α