

INTISARI

Odontektomi adalah pengeluaran gigi secara pembedahan dengan membuat flap mukoperiosteal dan pengurangan tulang rahang paling sering dilakukan di bidang bedah mulut dan maksilofasial. Prosedur ini akan mengakibatkan luka pada jaringan di sekitar gigi yang menyebabkan cedera dan rusaknya jaringan lunak dan keras serta menimbulkan respon inflamasi, menghasilkan pelepasan sitokin proinflamasi, salah satunya TNF- α , sehingga menyebabkan edema wajah, kemerahan intraoral dan nyeri. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian obat peroral metilprednisolon 40 mg peroral, 1 jam praodontektomi gigi molar tiga mandibula terhadap edema wajah, kemerahan intraoral, nyeri dan ekspresi TNF- α pascaodontektomi.

Jenis penelitian ini adalah *randomized placebo control trial*. Subjek penelitian adalah 24 pasien yang menjalani odontektomi di Poliklinik Bedah Mulut RSGM UGM Prof. Soedomo, sesuai dengan kriteria inklusi yang ditentukan, dibagi menjadi 2 kelompok yakni kelompok plasebo (12 orang) dan kelompok metilprednisolon (12 orang). Pengamatan terhadap edema wajah, kemerahan intraoral, nyeri (VAS) dan ekspresi TNF- α saliva (ELISA) dilakukan pada praodontektomi, H+1 (24 jam pascaodontektomi) dan H+3 (72 jam pascaodontektomi).

Hasil penelitian menunjukkan pasien yang menerima metilprednisolon peroral 40 mg praodontektomi memiliki edema wajah pascaodontektomi yang lebih kecil ($p=0,000$), skor kemerahan intraoral yang lebih rendah ($p=0,000$), skor nyeri pascaodontektomi yang lebih rendah ($p=0,000$), dan ekspresi TNF- α yang lebih rendah ($p=0,000$) dibandingkan dengan pasien yang menerima plasebo. Perubahan TNF- α memiliki korelasi paling kuat dengan perubahan nyeri dan kemerahan intraoral dibanding edema wajah.

Pemberian metilprednisolon 40 mg peroral 1 jam praodontektomi lebih efektif mengurangi edema wajah, kemerahan intraoral, nyeri dan ekspresi TNF- α pascaodontektomi molar tiga mandibula dibandingkan dengan plasebo.

Kata kunci : metilprednisolon, praodontektomi, edema wajah, kemerahan intraoral, nyeri, ekspresi TNF- α .

ABSTRACT

Odontectomy is a surgical removal of teeth by making a mucoperiosteal flap and reducing the jawbone, a procedure most commonly done in oral and maxillofacial surgery. This procedure is likely to cause injury and damage to soft and hard tissues, and stimulate inflammatory responses and generate release of proinflammatory cytokines, one of which is TNF- α , resulting in the facial swelling, intraoral redness and pain. This study was aimed at observing effects of 40 mg methylprednisolone, administered 1 hour before odontectomy on facial swelling, intraoral redness, and pain and level of TNF- α after odontectomy.

This randomized placebo control trial study involved 24 subjects who underwent odontectomy at the Oral Surgery Polyclinic of Prof. Soedomo Dental Hospital, Universitas Gadjah Mada. To comply with the inclusion criteria, the subjects were divided into the placebo group (12 patients) and methylprednisolone group (12 patients). The observation of facial swelling, intraoral redness, pain (VAS) and level of TNF- α (ELISA) was done before odontectomy, H+1 (24 hours after odontectomy) and H+3 (72 hours after odontectomy).

The results showed that patients receiving 40 mg methylprednisolone 1 hour before odontectomy experienced less postoperative facial swelling ($p=0.000$), a lower score of intraoral redness ($p=0.000$), a lower score of pain ($p=0.000$) and a lower level of TNF- α ($p=0.000$) than those administered with placebo. The changes in TNF- α showed the strongest correlation with the changes in postoperative pain and intraoral redness compared with facial swelling.

Oral administration of 40 mg methylprednisolone an hour before odontectomy is more effective in reducing facial swelling, intraoral redness, pain and level of TNF- α following odontectomy of mandibular third molar compared with placebo.

Keywords: *methylprednisolone, pre-odontectomy, facial swelling, intraoral redness, pain, level of TNF- α .*