

**PERBEDAAN KADAR PROSTAGLANDIN E2 SALIVA DAN
KRITERIA INDIKATOR KLINIS ANTARA SUBJEK YANG
MENDAPATKAN TERAPI STANDAR DENGAN YANG
MENDAPATKAN VITAMIN D SEBAGAI TERAPI
ADJUVAN PASCA ODONTEKTOMI
MOLAR KETIGA MANDIBULA**

ABSTRAK

Pendahuluan: Prosedur odontektomi mengakibatkan cedera jaringan pasca operasi yang mengakibatkan respon inflamasi (pembengkakan, nyeri dan keterbatasan membuka mulut) yang dapat menurunkan kualitas hidup subjek. Kadar vitamin D (25OHD) didalam tubuh memiliki peran dalam kondisi inflamasi. Pemberian terapi adjuvan vitamin D (terapi standar kombinasi dengan suplementasi vitamin D) pasca odontektomi molar ketiga mandibula dapat meningkatkan efikasi obat standar dalam mengurangi inflamasi. **Tujuan:** Tujuan penelitian adalah untuk menganalisa perbedaan pembengkakan, bukaan mulut, nyeri dan kadar PGE2 saliva antara kelompok terapi standar dengan kelompok terapi adjuvan vitamin D pasca odontektomi molar ketiga mandibula. **Metode:** Penelitian dilakukan pada subjek yang telah dilakukan tindakan odontektomi molar ketiga mandibula, yang dibagi menjadi dua kelompok (terapi standar dan terapi adjuvan vitamin D). Kedua kelompok dilakukan pengukuran pembengkakan wajah, skor nyeri, dan bukaan mulut sebelum operasi, 24 jam dan 168 jam pasca operasi. Pengambilan sampel saliva untuk mengukur kadar PGE2 dilakukan sebelum operasi dan 24 jam pasca operasi. **Hasil:** Hasil penelitian dari 93 orang didapatkan hasil perbedaan yang signifikan secara statistik pada pembengkakan wajah ($p=0,008<0,05$), bukaan mulut ($p=0,001<0,005$), nyeri ($p=0,001<0,005$) dan kadar PGE2 saliva ($p=0,001<0,005$). **Kesimpulan:** Terdapat perbedaan yang signifikan pada kelompok yang diberikan terapi adjuvan vitamin D dibandingkan kelompok terapi standar berdasarkan penilaian klinis dan kadar PGE2 saliva.

Kata Kunci: Inflamasi, Odontektomi, Prostaglandin E2, Vitamin D

**DIFFERENCE IN SALIVARY PROSTAGLANDIN E2 LEVELS
AND CLINICAL INDICATOR CRITERIA BETWEEN SUBJECT
RECEIVING STANDARD THERAPY AND RECEIVING
VITAMIN D AS ADJUVANT THERAPY AFTER
ODONTECTOMY MANDIBULAR
THIRD MOLAR**

ABSTRACT

Introduction: Odontectomy procedures result in postoperative tissue injury resulting in an inflammatory response (swelling, pain and limitation of opening the mouth) that can decrease the patient's quality of life. Vitamin D (25OHD) levels in the body have a role in inflammatory conditions. Adjuvant therapy of vitamin D (standard therapy in combination with vitamin D supplementation) after mandibular third molar odontectomy aims to improve the efficacy of standard drugs in reducing inflammation. **Objective:** The purpose of the study was to analyze the differences in swelling, mouth opening, pain and salivary PGE2 levels between the standard therapy group and the vitamin D adjuvant therapy group after mandibular third molar odontectomy. **Methods:** The study was conducted on subjects who had performed mandibular third molar odontectomy, which was divided into two groups (standard therapy and vitamin D adjuvant therapy). Both groups had measurements of facial swelling, pain scores, and mouth openings before surgery, 24 hours and 168 hours postoperatively. Saliva sampling for PGE2 levels is performed before surgery and 24 hours postoperatively. **Results:** The results of the study of 93 people found statistically significant differences in facial swelling ($p = 0.008 < 0.05$), mouth opening ($p = 0.001 < 0.005$), pain ($p = 0.001 < 0.005$) and salivary PGE2 levels ($p = 0.001 < 0.005$). **Conclusions:** There were significant differences in the group given vitamin D adjuvant therapy compared to the standard therapy group based on clinical assessment and salivary PGE2 levels.

Keywords: Inflammatory, Odontectomy, Prostaglandin E2, Vitamin D