

**KORELASI ANTARA *SURGICAL COMPLICATION ASSESSMENT SCALE IN THIRD MOLAR SURGERY* (SCATM) DENGAN KADAR PROSTAGLANDIN E2 (PGE2) PADA SALIVA PASCA ODONTEKTOMI GIGI IMPAKSI MOLAR KETIGA MANDIBULA**

**ABSTRAK**

**Pendahuluan:** Penatalaksanaan pada gigi molar ketiga merupakan tindakan pembedahan yang paling sering dilakukan. Tindakan odontektomi bisa menyebabkan cedera dan rusaknya jaringan lunak dan keras serta menimbulkan suatu risiko dan komplikasi diantaranya adalah respon inflamasi, nyeri, edema, alveolar osteitis dan abses. Inflamasi dimulai saat cedera jaringan mulai terjadi dan berlangsung 3 sampai 5 hari pasca odontektomi. *Surgical Complication Assessment Scale in Third Molar Surgery (SCATM)* merupakan instrumen baru untuk mengukur skala penilaian risiko dan komplikasi pasca odontektomi pada molar ketiga mandibula. **Tujuan:** Tujuan penelitian adalah untuk menganalisis korelasi antara *Surgical Complication Assessment Scale in Third Molar Surgery (SCATM)* dengan kadar Prostaglandin E2 (PGE2) pada saliva pasca odontektomi gigi impaksi molar ketiga mandibula. **Metode:** Penelitian dilakukan pada 25 pasien dengan kasus impaksi molar ketiga mandibula yang dilakukan odontektomi dalam anestesi lokal di Poli Bedah Minor Rumah Sakit Gigi dan Mulut (RSGM) Universitas Padjadjaran. Subjek pada penelitian ini adalah pasien yang memenuhi kriteria inklusi. Pemilihan subjek penelitian untuk kelompok uji dilakukan secara acak. Setelah dilakukan tindakan odontektomi, dilakukan pengukuran SCATM dan kadar PGE2 (T<sub>0</sub>). Selanjutnya dilakukan pengukuran pada jam ke-72 (T<sub>1</sub>) serta jam ke-120 (T<sub>2</sub>). Data yang terkumpul dianalisis dengan menggunakan uji korelasi *Rank Spearman*. **Hasil:** Hasil penelitian ini menunjukkan adanya korelasi yang kuat dan bermakna secara statistik antara SCATM dengan kadar PGE2 pada saliva pasca odontektomi gigi impaksi molar ketiga mandibula pada jam ke-72 dan jam ke-120. Nilai koefisien korelasi jam ke-72  $r=0.672$  ( $p<0.001$ ) dan jam ke-120  $r=0.728$  ( $p<0.001$ ). **simpulan:** Hasil penelitian ini menunjukkan adanya korelasi antara antara nilai *Surgical Complication Assessment Scale in Third Molar Surgery (SCATM)* dengan kadar Prostaglandin E2 (PGE2) pada saliva pasca odontektomi gigi molar ketiga mandibula pada jam ke-72 dan jam ke-120.

**Kata Kunci:** Odontektomi, Komplikasi, SCATM, Prostaglandin E2

**CORRELATIONS BETWEEN SURGICAL COMPLICATION  
ASSESSMENT SCALE IN THIRD MOLAR SURGERY (SCATM)  
WITH PROSTAGLANDIN E2 (PGE2) LEVELS IN SALIVA  
POST ODONTECTOMY OF IMPACTED MANDIBULAR  
THIRD MOLAR**

**ABSTRACT**

**Introduction:** The management of third molars is the most performed empowerment action. The procedure of odontectomy can cause injury and damage to soft and hard tissues as well as pose risks and complications, including inflammatory responses, pain, edema, alveolar osteitis, and abscesses. Inflammation begins when tissue injury begins and lasts 3 to 5 days post odontectomy. Surgical Complication Assessment Scale in Third Molar Surgery (SCATM) is a new instrument to measure the post odontectomy assessment scale and complications in mandibular third molars. **Purpose:** The aim of this study was to analyze the correlation between the Surgical Complication Assessment Scale in Third Molar Surgery (SCATM) and prostaglandin E2 (PGE2) levels in saliva after odontectomy of impacted mandibular third molars. **Methods:** The study was conducted on 25 patients with impacted mandibular third molars who performed odontectomy under local anesthesia at the Dental Hospital at Minor Surgery Clinic, Padjadjaran University. Subjects in this study were patients who met the criteria. The selection of research subjects for the test group was carried out randomly. After the odontectomy was performed, SCATM and PGE2 (T0) levels were measured. Furthermore, measurements were taken at the 72<sup>nd</sup> hour (T1) and the 120<sup>th</sup> hour (T2). The collected data was analyzed using the Rank Spearman correlation test. **Results:** The results of this study showed a strong and statistically significant correlation between SCATM and PGE2 levels in saliva after odontectomy of impacted mandibular third molars at 72 and 120 hours. Correlation value of the 72<sup>nd</sup> hour correlation  $r=0.672$  ( $p<0.001$ ) and the 120<sup>th</sup> hour  $r=0.728$  ( $p<0.001$ ). **Conclusion:** The results of this study indicate a correlation between the Surgical Complication Assessment Scale in Third Molar Surgery (SCATM) values and Prostaglandin E2 (PGE2) levels in saliva after odontectomy of mandibular third molars at 72 and 120 hours.

*Keywords:* Odontectomy, Complications, SCATM, Prostaglandin E2