Republic of Iraq
Ministry of Higher Education
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University of Baghdad
College of Dentistry



A parallel comparative study of the effect of preemptive administration of Prednisolone and Etoricoxib on post surgical sequalae following surgical removal of impacted mandibular third molars.

## A thesis

Submitted to the council of the College of Dentistry at the University of Baghdad, in partial fulfillment of requirements for the Degree of Master Science in Oral and Maxillofacial Surgery

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## **Abstract**

**Background:** Third molar surgery is one of the most common surgical procedures in dental practice which is followed by squeal of pain, swelling, redness and trismus. Steroidal and non steroidal medications have been used in order to reduce the discomfort after surgery. In this study a comparison between prednisolone and etoricoxib has been made to role out the best of which that can control these outcomes.

**Aim of the study:** This study aimed to compare the efficacy between prednisolone and etoricoxib on the reduction of the inflammatory process including pain, trismus and swelling following the surgical removal of mandibular third molar.

## **Materials and Methods:**

This clinical study was conducted upon 39 patients. 13 patients to receive 120 mg etoricocxib and 13 patients received 10 mg prednisolone half an hour before surgery and also 13 patients as a control group and a standard post operative medication was given to all 3 groups containing Augmentine, metraniadazole and panadole all three times a day for three days. Interincisal distance of upper and lower central incisors, pain measurement by numeric analogue scale and 2 lines which are the distance from corner of mouth to attachment of ear lobe and distance from outer canthus of eye to angle of mandible to record inflammation. Interinciasal distance and the two lines of inflammation were taken before surgery, 48 hours and 7 days after surgery. The pain was recorded from the day of surgery till seventh day after surgery.

**Results:** Regarding the pain, there was a significant difference between the groups in favor of etoricoxib in the 2<sup>nd</sup> and 3<sup>rd</sup> days post-surgery (p value 0.001). In regards to mouth opening, there was a significant difference in the reduction of the trismus in favor of etoricoxib in the 1<sup>st</sup> follow up in 48hrs (p value 0.001)

In regards to inflammation, the significant difference was in favor prednisolone in the  $1^{st}$  follow up in 48 hours (p value 0.001) and the difference was insignificant in the  $2^{nd}$  follow up to 7 days post-op.

**Conclusion:** this study showed that etoricoxib 120 mg has a significant effect in reduction of pain and trismus, however in terms of facial swelling prednisolone 10mg showed significant effect in terms of facial swelling.



جمهورية العراق وزارة التعليم العالي والبحث العلمي جامعة بغداد كلية طب الأسنان

## مقارنه بين اعطاء علاج الايتوريكوكسيب والبردنيزولون قبل عملية القلع الجراحي لسن العقل وتأثيرها في الحد من المضاعفات الناتجة عن تلك العملية.

رسالة مقدمة الى مجلس كلية طب الاسنان في جامعة بغداد كجزء من متطلبات نيل شهادة الماجستير في جراحة الفم والوجه والفكين

قدمت من قبل حسنين احمد عبدالشهيد بكالوريوس طب وجراحة الفم والأسنان

بإشراف الاستاذة الدكتورة سحر شاكر العادلي بكالوريوس في طب وجراحة الفم والاسنان ماجستير في جراحة الفم والوجه والفكين

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