Etoricoxib

Osteoarthritis (OA) is the most common joint disease, especially affecting the knee joint. Etoricoxib, a highly selective cyclooxygenase 2 inhibitor which can reduce postoperative pain after orthopedic surgery. The aim of a study of Wen et al. was to investigate the effects of oral etoricoxib on the development of OA and to examine concomitant changes in the nociceptive behavior of rats.

OA was induced in wistar rats by anterior cruciate ligament transection (ACLT) of the right knee. The ACLT + etoricoxib groups received 6.7 or 33.3 mg/kg of oral etoricoxib three times a week for 12 consecutive weeks, starting at week 8 after ACLT. Nociceptive behaviors and changes in knee joint width during OA development were analyzed. Histopathological studies were then performed on the cartilage. Immunohistochemical analysis was performed to examine the effect of etoricoxib on the expression of transforming growth factor-beta (TGF-β) and nerve growth factor (NGF) in articular cartilage chondrocytes.

OA rats receiving etoricoxib showed a significantly lower degree of cartilage degeneration than the rats receiving a placebo. Nociceptive behavior studies showed significant improvement in the ACLT + etoricoxib groups compared to that in the ACLT group. Moreover, etoricoxib attenuated NGF expression, but increased TGF-β expression, in OA-affected cartilage.

Oral etoricoxib in a rat OA model (1) attenuates the development of OA, (2) concomitantly reduces nociception, and (3) modulates chondrocyte metabolism, possibly by inhibiting NGF expression and increasing TGF-β expression [1)].

Duloxetine, Etoricoxib and opioid are of the commonly administered drugs in Lumbar laminectomy. The aim of this study is to assess the effect of perioperative use of Duloxetine in combination with Etoricoxib on postoperative pain and opioid requirements.

One hundred twenty patients with ASA physical status were enrolled with age between 18 and 70 years. Patients were divided randomly into four groups of 30 patients: group P received placebo, group E received etoricoxib 120 mg, group D received duloxetine 60 mg and group D/E received duloxetine 60 mg capsules and etoricoxib 120 mg; 1 h before surgery and 24 h after.

Neither Duloxetine nor etoricoxib individually had effect on pain with movement, while their combination revealed a significant reduction in pain scores over the entire postoperative period at rest and on movement. Etoricoxib showed a significant decrease in pain at all times at rest when compared with group P, while it showed significant pain decrease only at 0, 2 and 4 h when compared with group D. On the other hand duloxetine alone showed significant decrease in pain at rest at 24 h and 48 h when compared with group P. ConcerningMorphine requirement after 24 h.; it wassignificantly lower in the D/E group in comparison with groups P, E and D. It should be noted also that there was a significant decrease morphine requirement in both groups E and D.

The perioperative administration of the combination of etoricoxib and duloxetine improved analgesia and reduced opioid consumption without significant side effects. [2)].

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