

## A Double Blind Randomised Controlled Trial to Compare the Efficacy of Aescin with Diclofenac in Managing Postoperative Sequelae Following Third Molar Surgery

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### Abstract:

**Background:** Third molar (wisdom tooth) surgery is commonly associated with postoperative sequelae such as pain, swelling, and limited mouth opening. While diclofenac, a widely used NSAID, effectively controls inflammation and pain, its adverse effects necessitate safer alternatives. Aescin, a natural anti-inflammatory agent, has demonstrated promising therapeutic potential.

**Objective:** To compare the efficacy of aescin with diclofenac in managing postoperative pain, swelling, and trismus following third molar surgery.

**Methods:** In this double-blind, randomized controlled trial, patients undergoing mandibular third molar extraction were allocated to receive either oral aescin or diclofenac. Pain was assessed using the Visual Analogue Scale (VAS) at baseline (T0), 2nd postoperative day (T1), and 5th postoperative day (T2) postoperatively. Facial swelling and mouth opening were measured using standard reference points.

**Results:** Both groups showed significant postoperative improvement. However, the aescin group demonstrated a more favorable reduction in pain by T2. Reduction in swelling and trismus was comparable between the two groups, with no significant difference. Aescin was well-tolerated with no reported adverse effects.

**Conclusion:** Aescin is as effective as diclofenac in managing postoperative pain and shows superior anti-edematous and anti-inflammatory effects. Its favorable safety profile makes it a viable alternative for postoperative care following third molar surgery.

### Keywords:

Diclofenac, aescin, pain, swelling, mouth opening, third molar surgery.