

**Introduction:** Local Infiltration Analgesia (LIA) with corticosteroids (CS) has emerged as an option for postoperative pain control in total knee arthroplasty (TKA). Its efficacy remains debated, and the results of previous studies are inconsistent. The circumferential capsular infiltration technique has gained popularity, and some authors propose adding corticosteroids for their anti-inflammatory effect. The objective is to evaluate and compare the analgesic effect of periarticular infiltration with corticosteroids in TKA.

**Methods:** Retrospective study of 86 patients (100 knees) who underwent primary TKA with intraoperative periarticular infiltration. Two groups were compared: one with CS in the mixture (n=60) and one without CS. Pain control, immediate functional outcomes, and postoperative complications were evaluated.

**Results:** There were no significant demographic differences between groups. VAS scores at 8, 24, and 48 hours did not differ significantly: 3.6 vs. 3.1 (p=0.37); 1.45 vs. 1.8 (p=0.26); 0.85 vs. 0.7 (p=0.52). The CS group presented a shorter hospital stay (2.9 vs. 3.28 days; p=0.026). The non-CS group had a shorter surgical duration (91.5 vs. 113 min; p<0.001) and shorter ischemia time (64.9 vs. 73.6 min; p=0.01). There were no differences in age (69.6 vs. 68.1 years; p=0.32), BMI (29.8 vs. 28.7; p=0.21), use of rescue analgesics (31% vs. 30%; p=0.9), or incidence of arthrofibrosis (0% vs. 3.7%; p=0.308). A higher proportion of the CS group achieved ROM  $\geq 60^\circ$  at discharge (70.5% vs. 47.5%; p=0.02). The shorter hospital stay maintained significance in multivariate analysis (p=0.004). No deep nor superficial infections were observed.

**Conclusions:** There is heterogeneous literature regarding the use of CS in TKA. Infiltration with CS in TKA did not significantly improve pain, but it was associated with better range of motion at discharge and shorter hospital stay, without an increase in complications or infections.