Retrospective Analysis of the Non-Union Rate Associated with the Peri-operative use of Toradol in Osseous Foot and Ankle Surgery

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Introduction/Purpose: To evaluate the risk for non-union in patients who received Toradol in the perioperative period following osseous foot & ankle surgery. We propose there is no significant difference in non-union rate between patients who received Toradol in the perioperative period following osseous surgery, compared to those the literature reports of using NSAIDs in the post operative period.

Methods: Study Design: Random, Retrospective Chart Review of a single surgeon. 186 met the inclusion criteria with 172 complete charts available for review.

Procedure:
Osseous foot and ankle surgery including osteotomies, fusions, and fracture repair. (1st MPJ fusions, Lapidus, Ankle, TTC)

Inclusion Criteria:
Undergo osseous surgery including osteotomies, fusions, or fracture repair
Received Toradol in the perioperative period
Complete chart with radiographs

Outcomes:
Radiographic and chart analysis for non-union between the initial post-operative visit and the final visit

Results: A total of 186 patients were identified in having undergone a boney procedure and having received Toradol in the post-operative period. Out of the 186 patients, 172 charts were available for review. 165 of the 172 patients underwent unremarkable post operative healing. Seven patients (4.1%) were identified to have a clinical, radiographic or advanced imaging confirmed non-union. This was found to be not statistically significant with a p-value of < 0.005

Conclusion: Since the mainstream data available has been unable to draw a clear conclusion regarding NSAID use in bone surgery cases, our study aimed to present a large patient group that had no ill effects from its usage post operatively in osseous foot & ankle surgery. As the data demonstrates, there was no correlation that post operative use of potent NSAIDs increased the risk of non-union in the patient group.

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