

## The Non-Steroidal Anti-Inflammatory Drugs after Pterygium Surgery (In About 26 Cases)

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DOI: [10.36347/sjmcr.2021.v09i05.031](https://doi.org/10.36347/sjmcr.2021.v09i05.031)

| Received: 05.04.2021 | Accepted: 10.05.2021 | Published: 24.05.2021

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### Abstract

### Original Research Article

The pterygium is a new conjunctival triangular formation, the etio-pathogenesis is multifactorial and whose treatment is surgical but maybe complicated by postoperative recurrence. We conducted a prospective study of 52 eyes of 52 patients undergoing single pterygium by excision with conjunctival -limbic autograft, these patients were divided into two groups, the first having used non-steroidal anti-inflammatory drugs (Gp-NSAIDs) postoperatively for 1 month and the second without NSAIDs (Gp-Without). Thus, we could not demonstrate a beneficial effect of the use of non-steroidal anti-inflammatory drugs after pterygium surgery since we objected to a recurrence rate of 19% overall (15% for Gp-NSAID vs 23% for Gp- Without) with no statistically significant difference ( $p = 0.496$ ) and regardless of gender or age.

**Keywords:** Anti-Inflammatory Drugs Pterygium Surgery.

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## INTRODUCTION

It is in fact a wing-shaped conjunctival tissue proliferation generally located in the internal angle in front of the cornea. The progress recent has been possible to better knowing its pathophysiology is insufficient limbal stem cells.

There are several treatment methods for pterygium with varying degrees of success, but no technique guarantees the absence of recurrence.

## PATIENTS AND METHODS

We carried out a prospective study concerning 52 eyes of 52 patients operated on for simple pterygium by excision with conjunctival-limbal autograft, these patients were divided into two groups, the first having used non-steroidal anti-inflammatory drugs (Gp-NSAIDs) after operative for 1 month and the second without NSAIDs (Gp- Without). These patients were followed for 1 year.

## RESULTS

The mean age was 39 years (26 - 51 years), sex ratio of 3 men (39) to 1 woman (13). The mean age of

Gp- NSAIDs 38 year's vs 42 years in the control group. The sex ratio was almost similar in the two groups (Gp-NSAIDs with a ratio of 3.3 vs 2.7 for the control group).

With a 19-recidivism % in all (15% for the Gp-NSAIDs vs 23% for Gp-Without) no statistically significant difference ( $p = 0.496$ ).

Furthermore, there was no statistically significant difference ( $p = 0.165$ ) in recurrence between the two groups according to sex.

## DISCUSSION

The results of the study Montano, the treatment Bromfenac for three weeks reduces clinical signs and improves symptoms in patients with pterygium [1].

In the work done by Missotten, 0.1% indomethacin solution appears to be as safe and effective as 0.1% dexamethasone eye drops in managing postoperative inflammation and could be a good alternative to the steroid use [2].

In a randomized, double-mask, placebo-controlled study involving 62 adults undergoing pterygium surgery in which patients were randomized to receive either a 0.1% nepafenac ophthalmic suspension or a placebo in balanced saline solution; They were asked to rate the level of pain using an 11-point numerical rating scale at 6, 12, 24, 48, and 72 hours after surgery. Patients were also assessed daily for the progression of corneal epithelial healing until complete closure was observed and this study concluded that treatment with 0.1% nepafenac ophthalmic suspension significantly reduced postoperative pain compared to placebo after pterygium surgery [3].

In our work, we were not able to demonstrate a beneficial effect of the use of anti-inflammatory drugs after surgery because pterygium has objectified a 19% recidivism rate overall (15% for Gp-NSAIDs vs. 23% for Gp-Without) with no statistically significant difference ( $p = 0.496$ ) and regardless of gender or age.

## CONCLUSION

Pterygium is a triangular conjunctival neo formation with a corneal apex, its etio-pathogenesis is multifactorial and the treatment of which is surgical but which can be complicated by postoperative recurrence.

The use of nonsteroidal anti-inflammatory drugs after pterygium surgery has no influence on

reducing the rate of recurrence regardless of gender or age.

## Conflict of Interest

The authors declare no conflict of interest.

## Contributions from Authors

All authors have read and approved the final version of the manuscript.

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