

Endophthalmitis-Like Reaction Following an Intravitreal Injection of Triamcinolone Acetonide

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2. Key words

Triamcinilone, Maculae edema, Intra-vitreal injection, Complication, Pseudo endophthalmitis

1. Abstract:

1.1. Introduction: Pseudo endophthalmitis is a rare entity, described after intravitreal injection of Triamcinolone which manifests itself at the latest on the 3rd day, by a painless eye hyperemia, paradoxically with intra inflammation significant eye piece associating a pseudo-hypopion

1.2. Methods: we report the case of a patient followed for macular edema after cataract surgery, in whom we asked for an intravitreal injection of Triamcinolone acetonide (TA).

1.3. Results: Since the day 1 after intra vitreal injection of TA, the patient presented a pseudo endoph which regressed well under local treatment based on corticosteroid.

1.4. Conclusion: The pseudo endophthalmitis can often have a favorable prognosis, which should not be confused with true infectious endophthalmitis.

3. Introduction

Pseudo endophthalmitis is a rare entity, described after intravitreal injection of Triamcinolone which manifests itself at the latest on the 3rd day, by a painless eye hyperemia, paradoxically with intra inflammation significant eye piece associating a pseudo-hypopion.

4. Methods and Results

We report the case of a 58-year-old patient, unknown diabetic, operated cataract the right eye by phacoemulsification his incident, and who presented 2 months later, a visual acuity at 1/10 with a cystoid macular edema (Figure 1).

We opted for the IVT of Triamcinolone (4 mg / 0.1cc).

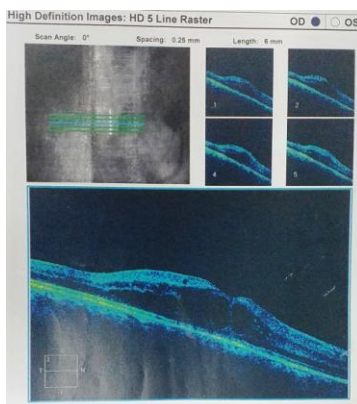


Figure 1: 2 Months post cataract surgery OD: Cystoid Macular Edema.

4.1. D1 post IVT: white, painless eye with tyndall 4+ without hypopion, which we treated with topical dexamethasone 1 drop / hour for 48 h followed by one drop x 8 per day with progressive degression

4.2. J7 Post IVT: decrease in Tyndall with appearance of irregular

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hypopion in the form of rods. (Figure 2)

D30: Complete cleaning of the anterior chamber (Figure 3) with complete regression of macular edema (Figure 4) and recovery of visual acuity corrected to 7/10.

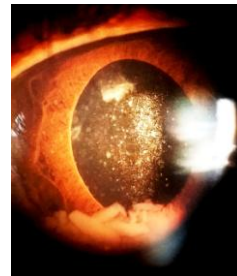


Figure 2: D7 post IVT Triamcinolone: Tyndall with pseudo-hypopion.



Figure 3: 1 Month post IVT Triamcinolone: Complete cleaning of the anterior chamber.

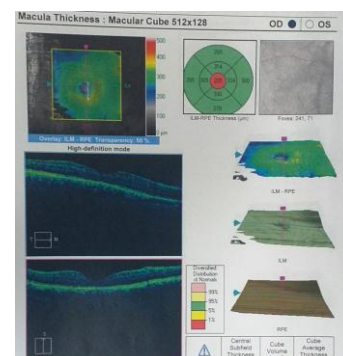


Figure 4: 1 month post IVT Triamcinolone: Regression of macular edema.

5. Discussion

In 1995, Penfold, in a pilot study, introduced triamcinolone in intra vitreal in the therapeutic arsenal of macular edema associated with diabetes, vascular occlusion, and uveitis [1], admittedly administered without marketing authorization in this indication, but it remains effective and affordable, nevertheless it is not without complications, among other things pseudo endophthalmitis which can pose a problem of differential diagnosis with septic endophthalmitis which remains the serious complication after an IVT.

Endophthalmitis like recation or Pseudo endophthalmia is a rare entity (0,2 – 1,6%), described after intravitreal injection of Triamcinolone which manifests itself at the latest on the 3rd day, by a white eye or a slight painless hyperemia, paradoxically with intra inflammation - significant eyepiece associating a pseudo-hypopyon [2].

It is not a specific complication of triamcinolone intra vitreal injection, and Although any eye is at risk of developing this complication, especially vitrectomized eyes and in cases of capsular rupture or zonular disinsertion [2].

The pathophysiology is not clearly elucidated, but which may be secondary to the toxicity of the product, the preservative or contamination of the material used [3].

The suggested etiologies include the potential effect of endotoxins, preservatives in some TA formulations [4] and the dispersion of triamcinolone acetonide (TA) crystals in the vitreous [5] and the benzyl alcohol preservative has been implicated in the pathogenesis of noninfectious endophthalmitis after intra vitreal Triamcinolone injection [4].

The Intraocular surgery, notably phacoemulsification or vitrectomy seems to be a favoring factor by increasing the diffusion of triamcinolone [6]. Its evolution is spontaneously favorable in less than 2 weeks [7].

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