

# Pseudohypopyon immediately after intravitreal injection of triamcinolone acetonide - Case reports

## *Pseudohipópio pós-injeção intravítreia de triancinolona - Relato de casos*

Vânia Ewert de Campos<sup>1</sup>

André Maia<sup>2</sup>

Cristina Muccioli<sup>3</sup>

Rubens Belfort Jr.<sup>4</sup>

### ABSTRACT

Report on the development of pseudohypopyon immediately after intravitreal injection of triamcinolone acetonide (TAAC). Two phakic patients presenting with a transient pseudohypopyon after having been treated with intravitreal triamcinolone. One had a clinically significant macular edema with cystoid component (CSME with CMS) and the other, active Vogt-Koyanagi-Harada (VKH) with serous retinal detachment of the macula. One eye from each patient developed a pseudohypopyon with crystal deposits adherent to the corneal endothelium. In one case it appeared right after the injection and disappeared spontaneously in 24 hours. In the other patient it appeared on day 3 and disappeared also spontaneously within 2 days. The pseudohypopyon is an important sign that can be observed after intravitreal injection of TAAC, in phakic patients, with spontaneous resolution and without complication. The pseudohypopyon caused by the deposition of TAAC in the anterior chamber immediately after its injection into the vitreous should be differentiated from other forms of hypopyon associated with this type of treatment.

**Keywords:** Uveitis; Eye diseases/chemically induced; Eye diseases/physiopathology; Triamcinolone/adverse effects; Triamcinolone/therapeutic use; Adrenal cortex hormones/adverse effects; Injections; Differential diagnosis; Case report [Publication type]

### INTRODUCTION

Triamcinolone acetonide (TAAC) is a potent, relatively insoluble steroid that has been used for various ocular diseases, and shown to be of benefit for the control of intraocular inflammation, especially in patients with vitreoretinopathy and resistant long-standing uveitis<sup>(1-2)</sup>. The most common side effects observed after intravitreal TAAC are elevated intraocular pressure (IOP) and progressive lens opacity<sup>(1-6)</sup>. Hypopyon also has been described. We present here two phakic patients, who developed pseudohypopyon immediately after TAAC intravitreal injection and which resolved without specific treatment.

#### *Case 1*

34-year-old woman, with Vogt-Koyanagi-Harada (VKH), with acute bilateral serous detachment; visual acuity of count fingers at 2 meters in both eyes (OU), no anterior chamber reaction and intraocular pressure (IOP) of 12 mmHg OU, was treated with an intravitreal injection of TAAC (0.1 ml) in the right eye. Immediately after the injection we could observe a semifluid substance accumulating in the inferior part of the anterior chamber forming a pseudohypopyon, and crystal deposits that accumulated on the endothe-

<sup>1</sup> Estagiária do Setor de Uveites e AIDS do Departamento de Oftalmologia da Universidade Federal de São Paulo - UNIFESP. São Paulo (SP).

<sup>2</sup> Doutor em Oftalmologia pela UNIFESP. São Paulo (SP).

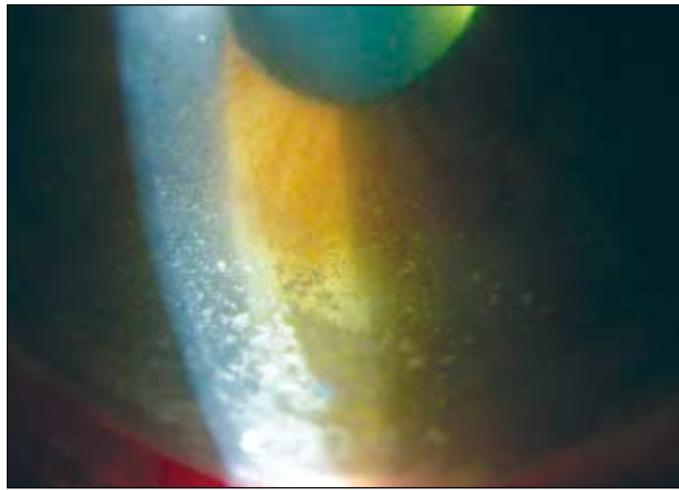
<sup>3</sup> Professora Afiliada, Livre Docente do Departamento de Oftalmologia da UNIFESP. São Paulo (SP).

<sup>4</sup> Professor Titular do Departamento de Oftalmologia da UNIFESP. São Paulo (SP).

**Endereço para correspondência:** Rua Botucatu, 822  
São Paulo (SP) CEP 04023-062  
E-mail: ewert@uol.com.br

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**Figura 1 - Pseudohypopyon, with crystal deposits adherent to the endothelial surface of the cornea**

lial surface of the cornea. There was no pain or rise in the intraocular pressure. One day later the pseudohypopyon had disappeared and the crystal deposits were observed in the corneal endothelium, for more 2 days.

#### Case 2

A 58-year-old diabetic man, with a best corrected visual acuity of 20/40 in OD and 20/400 in OS, no anterior chamber reaction and an IOP of 18 mmHg OU. The fundoscopic examination disclosed a proliferative diabetic retinopathy with clinically significant macular edema OU and with cystoid component in OS. He was treated with an intravitreal injection of TAAC (0.1 ml) and developed, 3 days after the injection a pseudohypopyon, with crystal deposits adherent to the endothelial surface of the cornea (Figure 1). In 3 days, the pseudohypopyon resolved spontaneously.

#### DISCUSSION

In these cases, TAAC was present in the anterior chamber and sediment like a hypopyon right after the intravitreal injection in one patient resolving in one day. In the other patient it appeared 3 days after the injection and persisted for 2 days. In both patients it resolved completely without treat-

ment. The pseudohypopyon may occur after intravitreal injection of triamcinolone, and seems to be a distinct clinical entity that may resolve without specific treatment.

#### RESUMO

Descrição de dois casos de pacientes submetidos à injeção intravítreia de acetona de triancinolona (AT), que desenvolveram pseudo-hipópio transitório. Um paciente apresentava edema macular diabético clinicamente significativo com componente cistóide e o outro, com descolamento seroso de retina agudo com Vogt-Koyanagi-Harada, e ambos desenvolveram pseudo-hipópio com presença de depósitos de cristais no endotélio corneano; em um caso o pseudo-hipópio desapareceu espontaneamente em 24 horas, no outro caso o pseudo-hipópio teve duração de 2 dias. O pseudo-hipópio é importante sinal que pode ser observado após injeção intravítreia de AT, em pacientes fálicos, apresentando resolução espontânea sem complicações. Este pseudo-hipópio causado por depósitos de cristais de AT deve ser considerado diagnóstico diferencial para hipópio infeccioso associado a este tipo de tratamento.

**Descritores:** Uveite; Oftalmopatias/induzido quimicamente; Oftalmopatias/fisiopatologia; Triancinolona/efeitos adversos; Triancinolona/uso terapêutico; Corticosteróides/efeitos adversos; Injeções; Diagnóstico diferencial; Relatos de casos [Tipo de publicação]

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