

A SCLERAL BUCLE INTRUSION 19 YEARS AFTER ITS USE IN RETINAL DETACHMENT SURGERY

INTRUSIÓN DE CERCLAJE ESCLERAL 19 AÑOS DESPUÉS

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ABSTRACT

Case report: Intrusion is defined as erosion and protrusion of the scleral implant into the vitreous cavity. This condition may occur as a retinal detachment, vitreous hemorrhage, endophthalmitis or be without symptoms. We performed a vitrectomy alone in a patient with relapsing vitreous hemorrhage secondary to the intrusion of a scleral buckle implanted 19 years previously and left intact the intruding buckle.

Discussion: Intrusion of the scleral buckle is an uncommon complication of retinal detachment surgery. We discuss the management of scleral buckle intrusion (*Arch Soc Esp Oftalmol 2007; 82: 443-446*).

Key words: Implant, retinal detachment, scleral buckle intrusion, vitrectomy, vitreous hemorrhage.

RESUMEN

Caso clínico: Se define intrusión como la erosión y protrusión del implante escleral en la cavidad vítrea. Esta condición puede presentarse como desprendimiento de retina, hemorragias vítreas, endofalmitis o de manera asintomática. Realizamos vitrectomía a una paciente con hemorragias vítreas de repetición secundarias a intrusión del cerclaje escleral implantado 19 años antes y dejamos intacto el cerclaje intraocular.

Discusión: La intrusión del cerclaje escleral es una complicación infrecuente de la cirugía del desprendimiento de retina. Discutimos el manejo de esta patología.

Palabras clave: Desprendimiento de retina, hemorragia vítrea, implante, intrusión cerclaje escleral, vitrectomía.

INTRODUCTION

Intrusion is defined as an erosion and protrusion of the scleral implant in the vitreous cavity (1). The intrusion may be caused by the materials implanted on the sclera as well as by intrascleral materials, including sutures (1-3).

We report here the case of a patient suffering from vitreous haemorrhaging (VH) with secondary

repetitions following scleral buckle intrusion 19 years after surgery.

CASE REPORT

This 65 year-old female patient was monitored regularly at our department after having been operated on twice in 1978 for retinal detachment (RD)

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in her right eye (RE). The first surgery consisted of a diathermy on the upper nasal quadrant where there was a retinal laceration and placement of a segmented scleral implant. After a month, after suffering a relapse of the RD, a full scleral buckle was put in place and tied to the lower temporal quadrant and a diathermy was carried out in this quadrant since there was some retinal degeneration. The patient presented a good postoperative response in which a good indentation of the segmented implant was observed and a prominent buckle.

In spite of not having symptoms, in 1997 the examination revealed scleral perforation with buckle intrusion extending over half an hour in the inferior temporal area, in an extensive area of coriorretinial atrophy (Fig. 1). Due to the extension of the intrusion and to the extensive area of coriorretinial atrophy it was decided to put the patient under observation.

One year later, the patient was operated on for a cataract in the right eye by means of phacoemulsification and implant of a lens in the capsular bag. Seven years later, a YAG capsulotomy was carried out in the RE for capsular opacity. The patient went one month later to consultation with VH in the RE. The ultrasound scan revealed the VH, the non-existence of RD and cerclage intrusion (Fig. 2). Once the VH had been partially reabsorbed in the first month, the patient had further bleeding, for which reason a vitrectomy was carried out to clean the blood.

Sixteen months after the surgery, the patient remains asymptomatic and without growth of the intraocular buckle size.

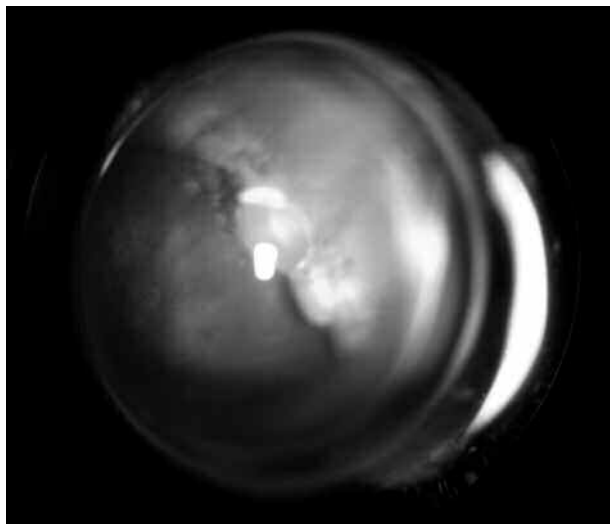


Fig. 1: Scleral cerclage intrusion.

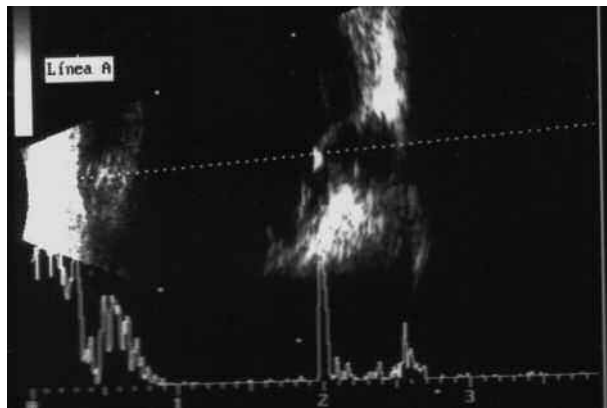


Fig. 2: Ultrasound scan showing the intrusion.

DISCUSSION

Scleral buckle intrusion is an uncommon complication of RD surgery, as it is observed in only 1 out of every 1,100 cases (1). The factors favouring intrusion are myopia, glaucoma, scleral buckle tension and the intensive treatment of pexia (4). In our case the patient had three of these risk factors since she had major myopia, had undergone intense pexia by means of diathermy in the inferior temporal quadrant and, in addition, she presented tension in the buckle attached to this quadrant. Patients with major myopia present a thin sclera and this, together with intense pexia, favours the intrusion of the tense buckle.

Our diagnosis was a chance finding as the patient was asymptomatic, but this condition may present as a recurrent RD or VH (as happened in our case seven years after diagnosis) and it may also present as a greater risk for the eye such as endophthalmitis (2).

Management of the intrusion depends on the intraocular extension of the buckle and the clinical presentation of the patient. Extraction of the buckle is not obligatory. It is possible to apply a wait and see attitude or the tension of the buckle can be reduced or it can be partially extracted (1). If there is RD, VH or serious danger for the integrity of the eye, vitrectomy may be carried out. Scleral defects may be repaired with a scleral tissue patch (1-3).

Due to the intraocular size of the cerclage and the fact the surrounding retina was atrophic and thinned, it was decided with the patient to adopt a wait and see attitude with respect to the intraocular buckle. We consider therefore that treatment should be individualized depending on the intraocular

extension of the cerclage, clinical presentation and the patient's wishes.

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