CONJUNCTIVAL INCLUSION CYST AFTER STRABISMUS SURGERY BY HANG-BACK RECESSION

QUISTE CONJUNTIVAL DE INCLUSIÓN TRAS CIRUGÍA DE ESTRABISMO SEGÚN TÉCNICA DE RETROINSERCIÓN EN ASA

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ABSTRACT

Case report: A 24-year-old woman, with a history of infantile esotropia and DVD operated on in infancy, had strabismus surgery performed by us. Four months later she presented with a cystic lesion that recurred after drainage and medical treatment. Complete excision of the cystic lesion was therefore performed.

Discussion: The epithelial cells implanted on the sclera at the time of the most recent surgery may have been the origin of inclusion cyst which developed after the strabismus surgery. This suggests a possible relationship with the scleral suture as the mechanism of cyst formation, independent of the muscle position. Complete excision is the recommended treatment for large cysts (Arch Soc Esp Oftalmol 2006; 81: 653-656).

Key words: Conjunctival inclusion cyst, strabismus surgery, scleral suture.

RESUMEN

Caso clínico: Mujer de 24 años con antecedentes de endotropía congénita más DVD operada en la infancia. Se realiza intervención quirúrgica y cuatro meses tras la cirugía presenta una lesión quística que recidiva tras drenaje y tratamiento médico. Se realiza exéresis completa de la lesión.

Discusión: El origen de los quistes de inclusión conjuntivales tras cirugía de estrabismo sería la implantación escleral de células epiteliales. Sugerimos la relación con la sutura escleral como mecanismo de formación, independientemente de la posición del músculo. El tratamiento de elección en los quistes de gran tamaño es la resección completa.

Palabras clave: Quiste conjuntival de inclusión, cirugía de estrabismo, sutura escleral.
INTRODUCTION

Conjunctival inclusion cysts are the result of implanting conjunctival epithelium after surgery or trauma. These cysts are an infrequent complication of strabismus surgery and can appear months or years after surgery (1). Occasionally a spontaneous resolution takes place, but most of these cysts require surgery. The treatment of choice is complete resection for larger cysts and resection or cauterization for smaller ones (1-3).

This communication presents a case of inclusion conjunctival cyst after strabismus surgery, its clinical evolution and treatment.

CASE REPORT

A 24 year-old woman with congenital endotropy history and surgery of middle rectum at age 3. The exploration revealed residual endotropy and DVD. Surgery was carried out as per the lateral rectum resection technique and retroinsertion in handle of both superior rectum. For months after the operation she exhibited a cyst-like conjunctival lesion with signs of inflammation in the superior nasal sector of her left eye (fig. 1). The lesion was drained, extracting a mucous-purulent liquid which led us to diagnose a subconjunctival abscess, establishing treatment with topical ciprofloxacine and dexametasone and systemic ciprofloxacine. One month later, the lesion relapses without inflammatory signs but with progressive growth. A complete surgical excise of the lesion was performed. The lesion was adjacent to the primitive insertion of the superior rectum (fig. 2).

The histopathological diagnosis is of benign cystic lesion. The study revealed the existence of a cystic formation with fibrous walls which includes vessels and some lymphoid aggregate, partially covered internally with a flat stratified epithelium. No significant mitosis or atypical signs were appreciated (fig. 3). After the surgery, the lesion did not recur.

DISCUSSION

Conjunctival inclusion cysts after strabismus surgery originate in the implantation of epithelial cells in the sclera during the operation.
The epithelium proliferates and gives rise to a cavity with fluid and remains of cell flaking and inflammatory cells (4). The appearance of these cysts has been described between months and even years after surgery. Some may disappear spontaneously but, more frequently, they persist.

During surgery, epithelial cells are captured by the suture when moving the conjunctiva. The origin of these cysts lies in the implantation of said epithelial cells through the scleral tunnels created by the needle. Cysts have been found between the intervened muscle and the sclera. In these cases there is no adherence between the muscle and the sclera and, on some occasions, a pseudo-tendon is formed which extends from the scleral zone where the muscle insertion is expected to be found up to the posterior fascia of the muscle. When removing the cyst, it is necessary to try and identify the existence of said pseudo-tendon so as to avoid the free excision of the cyst involving the loss of the muscle (1). In our case we found no evidence either in the exeresis or in the histopathological study of a direct relationship between the cyst and muscle fibers. During the exploration and resection of the cyst, we verified it was separated from the superior straight muscle, in which a handle retroinsertion had been performed. The cyst was in the superior nasal position, adjacent to the anatomic insertion of the superior straight muscle. We believe its origin could lie in the dragging of epithelial cells through the scleral tunnel during the suture, at the level of the nasal end of the primitive muscle insertion.

Other types of conjunctival cysts have been described such as those of glandular origin with cylindrical type epithelium (1). The histopathological study in our patient showed an epithelium similar to that of the conjunctiva, which confirms the diagnosis of conjunctival inclusion cyst.

It can be concluded that the best prevention method against the appearance of conjunctival inclusion cysts is a careful execution of the surgical technique, avoiding dragging Tenon’s capsule and the conjunctiva with the scleral sutures. We did not find in the literature descriptions of conjunctival inclusion cysts expressly related to the handle retroinsertion suture. Once the cyst is established, and if it is big, the treatment of choice is complete excision (1,2).

REFERENCES