



Suspected spinocellular carcinoma of the inferior eyelid resulted multiple chalazion



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Suspected spinocellular carcinoma of the inferior eyelid resulted multiple chalazion

Chalazion is a subacute granulomatous inflammation of the eyelid caused by retention of tarsal gland secretions¹ and it's the most common inflammatory lesion of the eyelid.

In cases of doubtful clinical presentation the diagnosis with a biopsy and a histopathological examination is important because it can orientate an appropriate surgical treatment.

We report a case of a 64-years-old diabetic man, suspected for a spinocellular lesion of the inferior eyelid of the left eye, it resulted unexpectedly a chalazion.

KEY WORDS: Chalazion, Diabetes, Eyelids, Neoplasm, Spinocellular carcinoma, Suspected lesion.

Introduction

Chalazion, known also as small hailstone, is a localized chronic lipogranulomatous inflammation affecting the sebaceous gland of the eyelid, usually the meibomian gland.

Etiology is characterized by retention of sebum within sebaceous tarsal gland of the eyelid ² caused by multifactorial process including local and systemic inflammatory conditions and skin conditions.

Chalazion presents as a red/brown painless solid lesion visible on the inner surface or on the margin of the eyelid. Chalazion's clinical features are often similar to many other various benign, premalignant and malignant lesions.

We report a particular case of a 64-years-old diabetic man, presented with a suspected carcinoma on the inferior eyelid of the left eye, whose diagnosis was unexpectedly related to a chalazion.

Case report

A 64-year-old male patient presented with multiple lesions on the inferior eyelid of the left eye. The lesions occurred spontaneously one year ago and the symptoms were treated with administration of local antibiotics and steroid eye drops without any improvement. As the lesions had grown bigger in the meanwhile, the patient consulted an ophthalmologist that suggested diagnosis of spinocellular carcinoma.

At clinical examination it had multiple lesions at 2/3 internal of the inferior eyelid, moderate ectropion of the inferior eyelid and chronic conjunctivitis lasting 1 year. The bigger one lesion, was rounded, approximately 8mm diameter, hard-elastic consistency, reddish, ulcerated, with irregular shape and irregular margins, characterized by painful and burning sensation, little tight to the tarsal

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Fig. 1: Frontal view before surgical treatment.



Fig. 2: Frontal view one year after surgical treatment.

plate, covered with conjunctival hyperemia, without overlying skin erythema or edema. The lesion was mobile over the conjunctiva and fixed at the underlying tissues. Near the main lesion there was two satellite nodules of 3mm diameter, whitish and slightly prominent, hard-elastic consistency, mobile over the conjunctiva and fixed to the tarsal plate.

There were no palpable preauricular and cervical lymph nodes.

The rest of the ophthalmologic examination showed normal visual acuities and extraocular motility and no significant abnormality.

Because of the clinical features of the lesions, the resistance to medical treatment with antibiotics and steroids eye drops and the suspected malignancy suggested by an ophthalmologist, it was decided to perform a pentagonal excision including the main lesion and the nearest whitish nodule, so to remove completely the two lesions and correct the ectropion.

The last satellite nodule was treated with an excisional biopsy waiting for the result of the histological examination of the main lesion before performing a bigger and invasive excision of inferior eyelid.

The specimens of the lesions were sent to the pathologist for the histopathological examination that showed mild orthokeratotic hyperkeratosis, acanthosis, papillomatosis, focal spongiosis and exocytosis. In the dermis, presence of inflammatory infiltrate lipogranulomatous with epithelioid cells, multinucleated giant cells intermixed with lymphocytes and plasma cells, associated with fibrous bands of collagen. The margins of the excision were found removed surgically.

Unexpectedly the histology evidenced a chalazion of all the lesions.

At one year the patient showed complete resolution of disease without recurrences. The pentagonal excision allowed removing the lesion without causing excessive inferior eyelid reduction and ensured the correction of ectropion.

Discussion

Chalazion is the most common inflammatory lesion of the eyelid.

Chalazion is an endogenous lipogranuloma characterized by a subacute granulomatous inflammation of the eyelid caused by multifactorial process secondary to by tarsal duct dysfunction or sebaceous gland's non-infectious obstruction, usually the meibomian gland ³⁻⁴.

The disease has a higher incidence in young female patients (10-29 years) and old male patients (60 years) and, usually, chalazion develops in the population living in urban areas, of lower socioeconomic class.

The risk factors statistically significant are seborrhea, dermatitis, blepharitis, acne rosacea, anxiety, Inflammatory Bowel Disease (IBD), gastritis, diabetes, smoking and hypothyroidism ¹, lipogranulomatosis and vitamin A deficiency ⁵.

Normally it presents as a multiple lesions reddish-brownish, fixed, solid, painless, swelling, monolateral or bilateral, which is best seen on the inner surface of the eyelid, although it may be visible at the eyelid margin if the meibomian duct is involved ².

Our patient's lesion appeared rounded, reddish, hard-elastic consistency, ulcerated, with irregular margins, irregular shape and little tight to the tarsal plate. Near the main lesion there were two benign satellite nodule.

The natural evolution of a chalazion is variable: either it can absorb, immediately after going through a phase of secondary infection or even abscess, or it can evolve to chronicity with the formation of a fibrous pseudocapsule and inflammatory infiltrate ⁶.

The spontaneous resolution of the small lesions is rare and such lesions can be treated with local or systematic drugs or eye drops.

The big chalazion must be treated with complete removal by laser or surgical excision.

In our case the lesion did not respond to drug treatment and the lesion increased in volume over time with the appearance of a small satellite nodule, blepharitis and moderate ectropion.

The diagnosis of chalazion can be difficult because the clinical features can mimicking other benign, premalignant or malignant lesions ⁷.

Our patient was diabetic and had had a blepharitis of the inferior eyelid for 1 year.

Diabetes has an important effect on the pathophysiology of blepharitis and can lead to a worsening of the inflammatory state cause an alteration of the clinical features of chalazion mimicking a spinocellular carcinoma such as in our case ⁸.

The spinocellular carcinoma is a malignant lesion that often resembles chronic conjunctivitis or chalazion. The lesion can be pale or reddish, ulcerated, with irregular shape and irregular margins. The common risk factors of spinocellular carcinoma ⁹ include the ultraviolet irradiation¹⁰, the reduced immunological state such as acquired immune deficiency syndrome ¹¹, and chronic inflammation of the conjunctiva ¹².

Microscopically the tumor mass can show moderately differentiated squamous cells, incomplete keratinization and tumor cell with atypical nuclei and numerous inflammatory cells ⁹.

In this case misdiagnosis of spinocellular carcinoma was made because of the non-responsive drug treatments, the ophthalmologist's suggestion and the clinical malignant features.

In case of suspect neoplasm the surgical remove followed by histological examination is the correct treatment.

In our case the pentagonal excision including the main lesion and the nearest whitish satellite nodule, allowed us to remove radically the lesions without recurrences at 1 year and allowed to correct the ectropion of the inferior eyelid, moreover the treatment of the satellite nodule with excisional biopsy was conservative and curative for chalazion.

Conclusion

Our case shows how chalazion may mimic a spinocellular carcinoma.

In diabetic patients it is essential to use accuracy in clinical diagnosis because the diabetes is a risk factor for

chalazion and it can cause an alteration of the clinical features mimicking a spinocellular carcinoma ⁸.

In case of multiple atypical lesions of the inferior eyelid a histological examination and a complete surgical removal must be considered mandatory in all patients because it allows making correct diagnosis and obtaining the complete resolution of the disease.

In diabetics patients presenting suspected multiple lesions and an ectropion of inferior eyelid the pentagonal excision including more lesions as possible, associated to an excisional biopsy can be a rational approach for preserving the aesthetic units of the eyelid and its functionality allowing to remove the lesion without recurrence and the correction of the ectropion.

Riassunto

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