

## HANDBOOK of Ocular Disease Management

### DERMATOCHALASIS & BLEPHAROCHALASIS

#### Signs and Symptoms

Dermatochalasis describes a common, physiologic condition seen clinically as sagging of the upper eyelids, and to some degree, the lower lids. It is typically bilateral and most often seen in patients over 50 years of age, but may infrequently occur in some younger adults. Inspection of these patients' lids reveals redundant, lax skin with poor adhesion to the underlying muscle and connective tissue. An excess flap or fold of skin in the upper lid is characteristic, and the normal upper lid crease may be lost. Dermatochalasis typically results in a ptosis, though occasionally patients will utilize the frontalis muscle to pull the lids open; this eliminates the ptosis but results in a wrinkling or furrowing of the forehead. Additional findings may include upper eyelid entropion, lower eyelid ectropion, blepharitis, or dermatitis.



Upper eyelid swelling in blepharochalasis.

Most commonly, dermatochalasis presents a cosmetic concern only, with patients complaining of "droopy eyelids" and "bags under the eyes," which may cause them to appear "older than they truly are." Some patients report true functional difficulties however, the most common being obstruction of the superior visual field.<sup>1</sup> Less commonly, patients may complain of ocular irritation secondary to misdirected lashes or chronic blepharitis.

Dermatochalasis is sometimes confused with blepharochalasis. Though similar in nomenclature, these two disorders are quite different in presentation and etiology. Blepharochalasis is a rare condition that appears to be inflammatory in nature. It typically affects only the upper eyelids, and may be unilateral as well as bilateral.<sup>2</sup> It is encountered more commonly in younger rather than older individuals.<sup>3</sup> The condition is characterized by exacerbations and remissions of eyelid edema, which results in a "stretching" and subsequent atrophy of the eyelid tissue. Complications of blepharochalasis may include conjunctival hyperemia and chemosis, entropion, ectropion, and ptosis.

#### Pathophysiology

The tissue alterations encountered in dermatochalasis are not unlike the normal aging changes of the skin seen elsewhere in the body. There is thinning of the epidermal tissue with a loss of elastin, resulting in laxity, redundancy, and hypertrophy of the skin. The etiology of dermatochalasis appears to be nothing more than repeated facial expression--smiling, laughing, squinting, crying, etc.--combined with the action of gravity over many years. Less commonly, systemic disorders such as Ehlers-Danlos syndrome, cutis laxa, thyroid eye disease, renal failure, and amyloidosis may hasten

the development of dermatochalasis.<sup>4</sup> Some patients may additionally have a genetic predisposition toward developing dermatochalasis at a younger age.

Blepharochalasis stems from recurrent bouts of painless eyelid swelling, each instance of which may persist for several days. The swelling most likely represents a form of localized angioedema, although this remains speculative. Ultimately, after numerous episodes, the skin of the lids becomes thin and atrophic, and damage to the levator aponeurosis ensues. Ptosis then becomes manifest. Blepharochalasis is idiopathic in most cases, though it has been linked to kidney agenesis, vertebral abnormalities, and congenital heart defects in rare instances.<sup>5</sup>

## Management

Patients with asymptomatic dermatochalasis require little treatment, although automated perimetry may be beneficial to document any significant compromise to the visual field and is often necessary prior to surgical correction. Patients should also be evaluated for blepharitis, trichiasis, or dry eye and treated accordingly with palliative and/or therapeutic agents. If examination reveals any other indications of underlying systemic disorders (e.g. thyroid or renal disease), then appropriate laboratory testing should be performed. Those individuals with symptomatic dermatochalasis should be referred for oculoplastic consultation with regard to blepharoplasty, which is the procedure of choice for this condition. Patients with significant ptosis due to levator dehiscence may require a combined procedure.



Dermatochalasis.

Likewise, blepharoplasty with or without ptosis repair is the preferred management option for patients with symptomatic blepharochalasis.<sup>6</sup> Acute instances of lid swelling may be addressed with cold compresses and oral anti-inflammatory agents in hopes of averting the ultimate outcome.

## Clinical Pearls

- Realize that dermatochalasis is a normal, physiologic condition that affects virtually all patients over the age of 50, to varying degrees. It is commonly asymptomatic and requires little intervention. In contradistinction, blepharochalasis is an atypical, pathologic syndrome that can result in significant visual impairment of young, active adults.
- A common feature to both dermatochalasis and blepharochalasis is the herniation of orbital fat through the septum orbitale in the upper or lower eyelids. This phenomenon is referred to as steatoblepharon. Like dermatochalasis, steatoblepharon is common with age, and may be quite pronounced in some individuals. It is most often noted in the medial upper eyelid. Treatment of this condition involves transconjunctival blepharoplasty with resection of the excess fatty tissue.
- Dermatochalasis should not be confused with floppy eyelid syndrome, a condition in which the

lids become flaccid due to a loss of tarsal elastin.

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