

Pharmacologic Treatment of Acquired Ptosis:

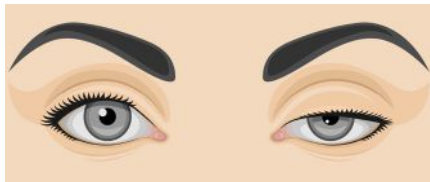
A Win-Win for Patients and Practices

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Treating blepharoptosis ('ptosis') has traditionally been the domain of the oculoplastic surgeon. As patients' primary eye care providers, optometrists have grown used to identifying and monitoring ptosis, and if the patient is motivated, making a referral for a surgical consultation, but otherwise taking a more conservative 'watch-and-wait' approach. While surgery certainly benefits many individuals with ptosis, producing good cosmetic and functional outcomes,¹ it is not the ideal course of action for all patients. Generally, surgery is reserved for cases in which drooping of the eyelid is severe enough to create a functional visual field deficit that qualifies for reimbursement, or for patients willing to pay for the procedure out-of-pocket. Further, ptosis surgery is by nature an invasive procedure, with known short-term and long-term side effects, that patients may be hesitant to undergo for cosmetic purposes.^{2,3}



Ptosis, a unilateral or bilateral drooping of the upper eyelid, can be treated surgically or pharmacologically.

Despite being among the most common conditions of the upper eyelid, the doctor-patient conversation about ptosis has traditionally been a brief one, especially when the presentation is mild or moderate. Cosmetic issues can understandably be a sensitive subject for patients

— and for doctors — particularly when the range of effective treatment options is relatively narrow or limited to surgery. As a result of these challenges, mild or moderate forms of ptosis in particular often remain untreated.

Oxymetazoline 0.1%: a novel treatment for acquired ptosis

It is in this context that the recent approval of a once-daily oxymetazoline 0.1% eye drop for the treatment of acquired blepharoptosis (Upneeq™ [oxymetazoline hydrochloride ophthalmic solution], 0.1%; RVL Pharmaceuticals, Inc., Bridgewater, NJ) is such an exciting development for patients and their eye doctors. The active chemical entity, oxymetazoline, is a potent agonist of α -adrenergic receptors expressed in the superior tarsal (Müller's) muscle.⁴⁻⁶ When administered to the surface of the eye, Upneeq™ is thought to act via these α -adrenergic receptors to cause contraction of Müller's muscle and raise the upper eyelid.

This novel pharmacologic option expands the therapeutic possibilities for acquired ptosis in an important and potentially game-changing way, providing the opportunity for practitioners to offer an effective treatment to more patients. In phase 3 clinical studies, Upneeq™, self-administered once daily by participants with acquired ptosis provided significant improvement in superior visual field deficits (measured using the automated Leicester Peripheral

Field Test [LPFT], a modified Humphrey visual field test designed to assess superior visual field deficits caused by ptosis⁷) and in upper eyelid elevation (evaluated using measurement of marginal reflex distance 1 [MRD-1]). Further, this novel agent had an excellent safety profile, with relatively few ocular adverse events (and even fewer that were suspected of being treatment-related), and no meaningful effect on ophthalmic measures such as intraocular pressure, pupil diameter, or visual acuity.⁸

Opening treatment up to more patients

For patients, this development is a big deal. The cosmetic aspect of unilateral or bilateral ptosis, even in relatively mild cases, can have real impacts, affecting an individual's sense of well-being and leading to increased levels of appearance-related anxiety and depression.^{9,10} Ptosis can also have functional impacts, in the form of superior visual field deficits, even when drooping of the eyelid is mild.^{7,11,12} Visual field impairment can negatively affect a wide range of daily activities, and therefore lead to reduced independence.¹⁰ In addition, it can result in the gradual adoption of compensatory behaviors, such as head tilting or brow elevation, that can cause meaningful discomfort or pain, that may be addressed, at least in part, by treating the patient's ptosis. Being able to offer a safe, effective, and simple solution for

acquired ptosis therefore has the potential to make a big difference in patients' lives. For a wide range of patients for whom treatment was not previously an option — for example, those with mild or moderate ptosis, those not interested in or wary of surgery, those considering surgery, but open to trying a different approach first, or those with more transient forms of ptosis — pharmacologic treatment in the form of a once-daily eye drop is an exciting opportunity (Table 1).

An active approach benefits practices

From a practice perspective, the benefits of actively incorporating pharmacologic treatment of acquired ptosis with oxymetazoline 0.1% are also clear. Patients want to know that their doctor is dedicated to adopting effective, novel approaches, especially when there is an opportunity to make treatment easier or open up treatment to individuals who previously had few options. Just as importantly, patients want to know that their doctor takes a truly comprehensive approach to improving their overall eye health, and that they will always be presented with options tailored to their individual needs. Patients also appreciate straightforward therapeutic options, meaning that the chance to opt for ptosis treatment prescribed by their eye doctor is appealing. This remains as true as ever in today's evolving healthcare environment.

In addition to providing another opportunity to satisfy a potentially large number of patients — ptosis is among the most common conditions of the upper eyelid among adults and prevalence increases with age¹³⁻¹⁵ — expanding practice offerings, including pharmacologic treatment of acquired ptosis, offers a chance to support practice growth by keeping current patients happy and creating new patient referrals.

Practically, examining patients' eyelids and discussing pharmacologic treatment of ptosis is quick and straightforward. The eyelids can be examined as part of the patient's comprehensive workup, and if ptosis is observed, a brief discussion is all that is needed to present this option and gauge their interest.

Patients are likely to want to try something safe and minimally invasive that has the potential to help their ptosis. Before initiating ptosis treatment, it is essential to confirm pathology of the upper eyelid retractor muscles or aponeurosis and rule out potentially serious underlying neurological or muscular causes such as Horner's syndrome, myasthenia gravis, or oculomotor nerve (CN III) palsy, or conditions that can 'masquerade' as ptosis, such as dermatochalasis.^{2,16,17}

Table 1.

Benefits of incorporating pharmacologic treatment of ptosis into clinical practice.

Patient benefits	Practice benefits
<ul style="list-style-type: none"> • Therapeutic opportunity for more / previously untreated patients with ptosis <ul style="list-style-type: none"> – Patients with mild or moderate ptosis – Patients uninterested in or wary of surgery – Patients considering surgery, but open to trying a different or 'bridge' approach – Patients with more transient forms of ptosis (e.g., resulting from periocular neurotoxin injection) 	
<ul style="list-style-type: none"> • Treatment directed and managed by primary eye care provider 	
<ul style="list-style-type: none"> • Opportunity to improve upper eyelid elevation and visual field without surgery⁸ 	<ul style="list-style-type: none"> • Practice differentiation and development / maintenance of 'early adopter' reputation
<ul style="list-style-type: none"> • Ease of use (once-daily eye drop) 	<ul style="list-style-type: none"> • Practice loyalty and referral building

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Delivering more comprehensive care

Treatment options have long been limited for patients with ptosis and their eye care providers. The availability of a novel pharmacologic therapeutic offers a real opportunity to continue to work toward truly comprehensive eye care, by treating more patients with ptosis. We have the ability to provide ptosis patients with a truly eye-opening experience.

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