

# **Cataract Surgery and Blepharospasm/Dry Eyes: Not as Cut and Dried as You Thought**

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Dry eye syndrome (DES) affects as many as 20% of North American adults. Although our understanding of DES has evolved significantly over the last few decades, appreciating it as a multifactorial condition with many environmental and lifestyle risk factors, it can still often be a frustrating condition to manage.

Benign Essential Blepharospasm (BEB) has been closely linked to dry eye syndrome (DES). There is some debate over whether DES leads (along with other factors) to BEB or BEB leads to DES, and the reality is that probably both are true, creating a vicious, integrated cycle with progressive worsening of both BEB and DES.

Establishing and maintaining a healthy eye surface and tear film are essential for anyone with BEB, since DES creates eye irritation that triggers eye spasm. In people with BEB, a short-circuit in the basal ganglia of the brain seems to fail to stop the spasms once they start. Although we now have many treatment options for BEB, including the botulinum toxins and various medications and surgeries, avoiding DES remains an important cornerstone in BEB management.

Unfortunately, just as both the occurrence and severity of DES increases with age, so does cataract formation. For people with BEB who are already struggling with their vision, further vision impairment from cataracts can be devastating, and some forms of cataracts don't just blur vision, but also cause glare and distortion, inducing even more eye irritation and spasm.

The good news is that cataract surgery, in the hands of an experienced surgeon, is a low-risk procedure providing great satisfaction and visual improvement. The bad news is that many cataract surgeons may not have a clear understanding of the special needs of people with BEB.

Immediately following cataract surgery, the quantity, quality, and stability of tears bathing the eye is often reduced (we'll spare you the mechanical, biologic, and biochemical explanations for why), potentially causing or worsening existing DES, which in turn may worsen BEB. Many researchers believe that tear production and quality usually return to their pre-surgical states within 3 months, but others have argued that some eyes may never regain their same pre-operative lubrication, protection, and comfort.

Although most cataract surgeons today are keenly aware of the increased risk of DES following cataract removal and attempt to diagnose and treat eye surface disease before surgery, there are several things that a person with BEB can do to improve their own surgical outcome.

Inform your cataract surgeon about your BEB and DES and current treatment. Your surgeon will be able to perform a few tests to quantify your tear film problem and maximize your management. Ask your doctor about whether or not consumption of flaxseed oil and omega-3 oil along with a sulfonated protein would improve your situation and whether eyelid scrubs would help pre-operatively. If your symptoms of DES or BEB worsen after surgery, inform your physician right away, so that greater measures may be taken to ensure your comfort and eye safety.

Remind your surgeon about the tight connection between DES/eye irritation/and BEB and avoid concomitant refractive procedures which may worsen DES. Think twice about special lenses your surgeon may offer to implant in the eye, such as multifocal lenses, which can induce glare or visual aberrations. Such problems may be mildly annoying to the average person, but devastating to someone with BEB.

Review carefully with your surgeon when would be the best time to perform your cataract surgery relative to botulinum toxin injections. Surgery is probably best avoided during times when your eyes are most dry and when they are most strongly spasming.

In summary, cataract surgery is generally safe, and for many profoundly vision rehabilitative. With good physician - patient communication and appropriate preoperative assessment and planning, most people with BEB will enjoy significant vision improvement.

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