



Dry Eye/Punctal Plugs

Dry eye is a condition that affects a large number of us. Initially, dry eye may be a relatively minor problem, but it can cause serious difficulty for some of us. Dry eye may begin at any age, and tends to get worse as we get older.

Symptoms caused by dry eye can include burning, irritation, and itching, as well as tearing or watering eyes. You might not expect tearing to be a problem in patients with dry eye. This paradoxical symptom is related to an abnormal tear film or a tear layer insufficiency. The surface of the eye is dry and sends a signal to the brain to secrete more tears and moisturize the cornea. However, the tears that are secreted by the lacrimal (tear) gland may be of poor quality and not moisten the eye surface in the way that they should.

Other dry eye symptoms may include eye pain or blurred vision. One clue that blurred vision is due to dry eye is that it clears temporarily after blinking. Dry eye symptoms can be especially troublesome while reading, watching TV, and working on the computer. Symptoms tend to be worse on windy days and during the winter months due to dry indoor heat.

In general, artificial tears remain the mainstay of treatment for dry eye symptoms. There are many brands of artificial tears available and they vary in their composition, active ingredients, preservatives, etc. Patients with severe dry eyes are usually prescribed preservative-free artificial tears to reduce side effects such as toxicity that can develop when the tears are used more frequently. Sometimes thicker eye gels are prescribed for severe dry eye, in order to provide longer lasting lubrication. Dry eye ointments may be appropriate for people who need additional lubrication at night.

If the eye is still too dry, then a procedure can be done to block the system of canals (lacrimal system) that normally drain the tears away from the surface of the eye. This is the equivalent of putting a plug in the drain of the sink. Temporary collagen or longer-lasting plastic **punctal plugs** are placed in any of the four punctae (openings that lead into the lacrimal system) to hold natural or artificial tears on the surface of the eye longer. If permanent closure of the lacrimal punctate is needed, then a surgical procedure to cauterize the punctae may be performed.

Severe dry eye can cause damage and scarring of the surface of the eye. For these patients, eye medications may be necessary to reduce the surface damage and scarring. Drugs that suppress the body's natural defenses like steroids or immunosuppressants such as cyclosporine can be applied in drop form to reduce surface inflammation.



Dry eye may develop on its own, or it may result from other problems. Such problems include abnormalities of the eyelids or poor eyelid closure, general health problems or medications used to treat these problems, or environmental factors such as air conditioning, humidity and smoke.

The management of dry eye can vary significantly from patient to patient and we have more treatment choices than ever before. Consult your eye doctor to determine what treatment program will be the most appropriate for you.