

# The Connection Between RA and Dry Eyes

by EFFIE KOLIOPOULOS

## Rheumatoid Arthritis and Dry Eyes

Rheumatoid arthritis is known to affect primarily the lining of the joints called synovium. Though the chronic inflammatory disease can impact other parts of the body as well, including the eyes.

A common issue seen in rheumatoid arthritis patients is dry eyes. Eye dryness can be just a mere inconvenience for many people and nothing over-the-counter eye drops, supplements or an eye doctor appointment can't fix. However, in those with RA, dry eyes can be prone to infection or scarring. The symptoms usually appear from the inflammatory process already present in the body.

According to Sandeep Jain, MD, associate professor of ophthalmology and director of the Dry Eye and GVHD Services at the University of Illinois College of Medicine, the immune system attack on the surface of the eye is a mirror image of what is destroying the joint synovium.

## Taking a Closer Look at the Eye

An autoimmune disorder found in some RA patients, called Sjogren's Syndrome, causes dry eyes. This condition in addition to rheumatoid arthritis can be painful.

Tears are made out of four things: oil, water, mucin and proteins, all of which bathe the cornea with moisture and various nutrients each time a person blinks.

For people with chronic dry eye, not enough tears are made or they disappear too fast during evaporation.

This can make simple tasks such as reading, working on a computer or driving a challenge. Other factors such as old age, menopause, pregnancy, hormonal changes, and many medications can also cause dry eyes.

#### Types of Treatments Available

Depending on the severity and why it started to begin with, dry eyes may not be fully curable. In many cases, the condition can be managed with success.

If left untreated, a severe form of eye dryness can occur. When it reaches that stage, it can cause damage to the cornea. The cornea is the clear, dome-shaped surface of the eye that helps your vision to come into focus.

Medication used to treat arthritis can help dry eyes minimally, but the outcome is one where a patient will have a higher chance of needing additional treatment.

## **Artificial Tears**

These can be found over-the-counter and don't usually need a doctor's prescription. Your eye doctor can recommend more non-invasive eye drops with fewer side effects if you have a mild case of dry eyes.

#### **Steroids**

Artificial tears are sometimes not enough, and corticosteroids may be needed. However, be aware that long-term use of steroids in the eye can lead to complications such as an increased risk of glaucoma and cataracts; so, they are best to be used short-term.

#### Restasis

Not to be confused as a steroid, Restasis is an immunosuppressive agent used to treat chronic dry eyes that is being caused by inflammation. This is usually the case with dry eyes in those who have RA; so, if you have RA and severe chronic dry eyes, this could be an option for you.

#### Eye Inserts, Serum Drops and Silicon Contact Lenses

There are more advanced options that can offer relief. With eye inserts, they can be placed in your eyes once a day and artificial tears are released for up to 24 hours.

Serum drops made out of a treated sample of your blood with artificial tears, can provide vitamins and growth factors that mimic what is found in real tears. It's often used for those with barely any tear production or other autoimmune diseases to get the inflammation under control. However, it is not a long-term solution and patients eventually move on to other options after trying this.

Dry eyes can cause pain and light sensitivity, so disposable contacts made out of silicone hydrogel can surround the eye with water for 12 hours. Other types of contact lenses such as scleral ones cover a larger surface area of the cornea, which alleviates symptoms even more.

#### **How to Prevent Dry Eyes**

Early diagnosis by a medical professional can help you effectively create a treatment plan for chronic dry eyes. Preventing dry eyes when it's being caused by a disease such as rheumatoid arthritis, may not be easy, but it can be done.

The non-invasive routes to preventing dry eyes are taking flaxseed oil, fish oil capsules and exercising. Studies have shown mixed results when it comes to the efficacy of fish oil for eye health, but the high amount of Omega-3s from the fish and flaxseed oil can certainly help reduce inflammation overall.

Also, making environmental changes may improve symptoms. A clean air filter to avoid allergens from getting inside the eye is a must-have. In the winter, adding moisture to the air using a humidifier can reduce any dry indoor air that irritates the eyes. When driving or styling your hair, make sure not to point hair dryers or any sort of fan towards the eyes. Another method of prevention is using a warm, wet cloth that's held over the eye for a few minutes to reduce any irritation.

Exercise is one of the key treatments for arthritis but also for the eyes. Cardiovascular exercise can increase blood flow to the eye area. This aids in the release of any oils needed for healthy tears to develop, which can then rejuvenate surrounding tissues.

However, these home remedies for preventing dry eyes may not always work, at least not completely. If you have rheumatoid arthritis and persistently dry eyes, you should see your doctor about chronic dry eyes. Seeking medical attention at the first signs of dryness is crucial to prevent further complications. Your rheumatologist or primary care physician will be able to refer you to the proper optometrist or ophthalmologist for an examination.