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800-283-7800

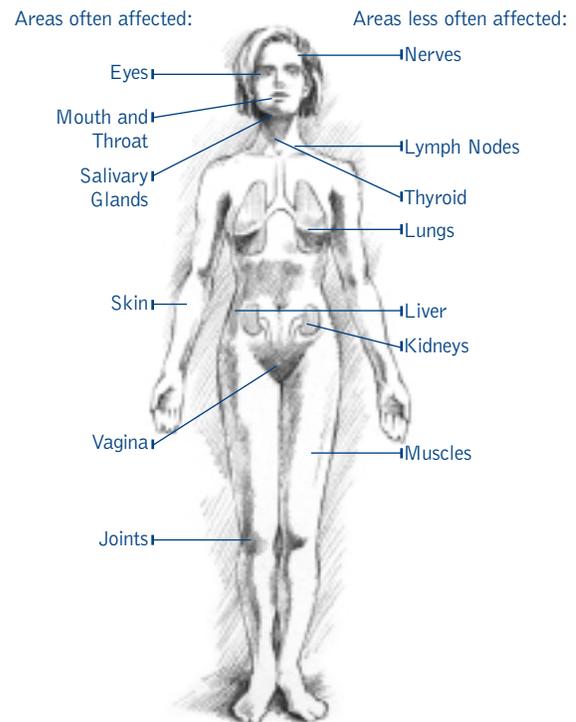
# Sjögren's Syndrome

## WHAT IS SJÖGREN'S SYNDROME?

Sjögren's (SHOW-grens) syndrome is an autoimmune disease that causes dryness, particularly of the eyes and mouth. In autoimmune diseases (*auto* means self) the immune system does not function properly and can no longer tell the difference between some of the body's own cells and foreign substances, such as infections or viruses. Instead of fighting the foreign substances, the immune system mistakenly fights the body's own cells.

Sjögren's syndrome can occur in two forms: primary and secondary. Primary Sjögren's syndrome occurs by itself and is not associated with other diseases. Secondary Sjögren's syndrome occurs in association with other forms of arthritis, such as rheumatoid arthritis, lupus, myositis or scleroderma.

Approximately 1 million people in the United States have Sjögren's syndrome. While it can affect people of any race or age, 90 percent of people with the condition are women. The syndrome is relatively rare in people under age 20. Your chances of having Sjögren's syndrome increase if someone in your family has the condition.



In people with Sjögren's syndrome, a type of white blood cell called a lymphocyte invades moisture-producing glands, such as tear and saliva glands. Lymphocytes can damage these glands, preventing them from producing moisture.

In addition to dryness, Sjögren's syndrome can cause problems in other parts of the body.

These can include joint inflammation leading to arthritis, as well as inflammation in the lungs, kidneys, liver, nerves, thyroid gland and skin.

## DIAGNOSIS

The cause of Sjögren's syndrome is not known, but there is some evidence that heredity and viral infections may play a role. Your doctor's diagnosis may be based on the sources of information listed. Getting the right diagnosis is important for making sure you get the proper treatment. Early diagnosis is important to lessen or prevent the effects of dryness of the eyes, mouth and involvement of other organs.

First, your doctor will review your medical records and ask you to describe your symptoms. The doctor will also examine you for changes in your eyes, mouth and/or salivary glands; enlargement of lymph nodes in your neck; muscle weakness; and joint inflammation. Your doctor may recommend that you have an eye exam done by an ophthalmologist (eye specialist).

## Diagnostic Tests

There is no one test to find out if you have Sjögren's syndrome. Your doctor may conduct some of the following tests to help confirm your diagnosis:

**Blood tests:** Tests for specific antibodies can help to confirm Sjögren's syndrome. Patients with Sjögren's syndrome have a high frequency of particular types of antibody called anti-SS-A (also called anti-Ro) or anti-SS-B (also called anti-La). People with Sjögren's syndrome also commonly have other antibodies that develop with autoimmune diseases such as antinuclear antibody (ANA) and rheumatoid factor. In addition, increased levels of the erythrocyte sedimentation rate (ESR or sed rate) or levels of immunoglobulin are generally found.

**Schirmer test:** This test measures the ability of your eyes to produce tears. A small strip of paper is placed beneath your lower eyelid and the amount of tears your eye (lacrimal) glands produce is determined.

**Slit-lamp examination:** This test is used to examine any effects to the surface of the eye that result from dryness. An ophthalmologist puts a drop of dye into your eye and examines it with a special instrument called a slit lamp. The dye stains the dry or eroded areas on the surface of your eye. A similar test called the Rose Bengal test also may be used to look for effects of dryness on the surface of the eye.

**Lip biopsy:** For this test, the doctor removes a small piece of tissue from the inside of your lip and examines the tissue under a microscope. If you have Sjögren's syndrome, the glands that produce saliva will contain small clusters of lymphocytes or show evidence of damage to the glands as a result of inflammation.

**Salivary function tests:** These tests check the degree of mouth dryness by measuring the actual amount of saliva you produce. Usually, the doctor will have you chew on a piece of paraffin wax and then spit into a cup to measure your saliva production. Alternatively, a doctor may place a pre-weighed sponge under your tongue, then remove the sponge and reweigh it to determine the amount of saliva your tongue has absorbed.

**Urine tests:** Your doctor may use these tests to check your kidney function, which in some cases may be affected by Sjögren's syndrome.

## SYMPTOMS AND TREATMENTS

Sjögren's syndrome affects everyone somewhat differently, and its symptoms vary in severity.

One of the main goals of overall treatment is to relieve discomfort and lessen or prevent the

effects of the dryness. Your treatment plan needs to be based upon your specific needs.

### Medications

Your doctor may recommend several forms of medications to treat the symptoms of Sjögren's syndrome. **Aspirin and nonsteroidal anti-inflammatory drugs** (NSAIDs) can help reduce joint pain and stiffness and ease muscle aches. **COX-2 inhibitors**, such as celecoxib (*Celebrex*) and rofecoxib (*Vioxx*), are a subcategory of NSAIDs that may be safer for the stomach. Studies have shown that **hydroxychloroquine** (*Plaquenil*) or **methotrexate** can help relieve joint pain, rashes and fatigue in some people. If your muscles, nerves, kidneys or lungs are affected, your doctor may recommend stronger medicines, such as **glucocorticoids** (prednisone) or drugs that suppress your immune system response such as azathioprine or cyclophosphamide.

Other symptoms and signs of Sjögren's syndrome and their treatments are described in more detail below.

### Symptoms and Signs of Sjögren's Syndrome

- Dry mouth
- Dry eyes
- Swollen salivary glands
- Vaginal dryness
- Fatigue

### Dry Mouth

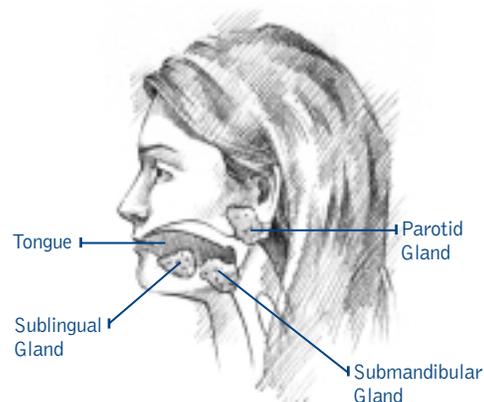
Your mouth normally contains saliva, which helps you to chew, swallow and speak. Sjögren's syndrome causes your body to produce much less saliva than normal, which makes chewing,

swallowing and speaking difficult. Reduced saliva can also decrease your sense of taste.

Because saliva contains substances that fight bacteria, viruses and fungi, it helps protect your teeth and the lining of your mouth. When there is less saliva, you produce less of these protective substances. Your teeth may decay more easily, particularly near your gum line. You also may have tenderness, swelling and redness of the lining of your mouth or tongue.

### SWOLLEN SALIVARY GLANDS

Glands located under your tongue, in your cheeks, in front of your ears and under the back of your mouth produce saliva. In some people with Sjögren's syndrome, these glands may look or feel swollen. Sometimes they may become tender.



You have three pairs of saliva glands, as shown above. In Sjögren's syndrome, they can become swollen.

### ORAL YEAST INFECTION

Oral yeast infection (or oral thrush) is a condition caused by a common yeast called candida that produces redness and burning in the lining of the mouth and decreased sense of taste. People with Sjögren's syndrome are at an increased risk of developing oral yeast infections because of the reduction in saliva. Your doctor may prescribe an antifungal medication to treat the infection.

**WHAT TO DO FOR DRY MOUTH:**

- Take small sips of water during the day.
- Chew sugar-free gum or suck on sugar-free hard candies to stimulate saliva.
- See your dentist or doctor for treatment of oral yeast infections (candidiasis or thrush). These infections can often recur, which means you may need additional treatment.
- Use nonprescription saliva substitutes or mouth-coating gels. They are especially helpful at night when your mouth becomes drier.
- Your doctor may prescribe pilocarpine tablets (*Salagen*) or cevimeline capsules (*Evoxac*) to treat symptoms of dry mouth associated with Sjögren's syndrome. With regular use, these tablets can help relieve mouth dryness by stimulating the salivary glands. The effects last several hours, so you may need to take three or four tablets each day. You should not take these medications if you have asthma or other conditions such as narrow-angle glaucoma.

**Protecting Your Teeth**

- Have frequent dental checkups.
- Brush and floss your teeth regularly, especially after meals.
- Avoid sugar-containing foods and drinks between meals.
- Ask your dentist about fluoride gels and special rinses you can use at home.

**Dry Eyes**

Sjögren's syndrome can make your eyes feel dry or gritty. Your eyes may burn and look red. Excess mucous may build up in the corners of your eyes while you sleep. Your eyes may be more sensitive to sunlight.

If not properly treated, Sjögren's syndrome can lead to dry spots on the cornea (the transparent outer covering of the eye) and corneal ulcers. In rare cases, this can cause loss of vision.

**WHAT TO DO FOR DRY EYES:**

- Use artificial tears to help relieve discomfort. Consider preservative-free products if you apply drops more than four times per day.
- Use lubricating eye ointments at night.
- Use wraparound sunglasses or moisture shields that attach to glasses to prevent moisture evaporation.
- Your doctor may recommend a procedure called punctal occlusion. This operation keeps tears from draining out of your eyes and into your nose, helping your eyes retain their natural moisture.

**Dry Nose, Throat and Upper Airways**

Dryness may make your throat feel dry and tickly. You may have sinus dryness and post-nasal drip that contribute to a dry cough and hoarseness.

Using nasal sprays of water during the day and, in some climates, using a home humidifier may help ease these symptoms.

**Vaginal Dryness**

Sjögren's syndrome can cause vaginal dryness and make intercourse painful for women.

Using vaginal lubricants made specifically to help vaginal dryness and occasionally using estrogen creams can help ease dryness.

**Fatigue**

Fatigue is a common symptom of Sjögren's syndrome. It can be a part of the disease itself or it can result from the physical and emotional stress of having a chronic illness. (For more

information, request a free copy of the Arthritis Foundation brochure *Managing Your Fatigue*.)

### Other Symptoms

Sjögren's syndrome also can cause swollen, painful joints; muscle weakness; dry skin; rashes; nerve involvement; numbness and tingling sensations; and swollen lymph nodes. Medical exams and continued follow-up are important to monitor and treat these other symptoms.

### Skin Care

Follow these tips for treating dry skin that can be part of Sjögren's syndrome:

- Use hypoallergenic soaps and lotions made for dry, sensitive skin.
- Avoid drafts from air conditioners, heaters and radiators when possible.
- Avoid detergents, deodorant soaps and very hot water, which can dry your skin more.
- Use a humidifier to add moisture to the air.

### OUTLOOK

Sjögren's syndrome is generally not life-threatening, but dryness may last for the rest of your life. You can effectively manage symptoms and prevent dental decay and damage to the eyes. Serious problems with internal organs are uncommon, but if they do occur, more aggressive management may be added to Sjögren's treatment to control inflammation and prevent damage and preserve function.

Regular exercise is good for your overall health and can help keep joints flexible and muscles strong. Walking, swimming and range-of-motion exercises are good options for people with Sjögren's syndrome.

If you have Sjögren's syndrome and another form of arthritis, make sure you follow your doctor's complete treatment program.

### FOR MORE INFORMATION

Contact your local Arthritis Foundation chapter for a list of free brochures about arthritis and related conditions, treatment options and self-management techniques. Services that may be available in your area include:

- **Arthritis Self-Help Course** – Learn how to take control of your own care in this six-week (15-hour) class.
- **Warm-water exercise classes** – Join in the fun of a six- to 10-week exercise program in a heated pool.
- **Land exercise program** – Move easier in several levels of exercise classes, or exercise at home by purchasing an Arthritis Foundation exercise videotape.

You also may want to contact the following organizations for additional information and support:

- **Sjögren's Syndrome Foundation**  
800/4-SJOGRENS (75647367)  
[www.sjogrens.com](http://www.sjogrens.com)
- **National Sjögren's Syndrome Association**  
800/395-NSSA (6772)  
[www.sjogrens.org](http://www.sjogrens.org)

### THE ARTHRITIS FOUNDATION

The mission of the Arthritis Foundation is to improve lives through leadership in the prevention, control and cure of arthritis and related diseases.

The Arthritis Foundation supports research with the greatest potential for advances and has

invested more than \$320 million in these efforts since its inception in 1948. Additionally, the Arthritis Foundation supports key public policy and advocacy efforts at a local and national level in order to make a difference on behalf of 70 million people living with arthritis.

As your partner in taking greater control of arthritis, the Arthritis Foundation also offers a large number of programs and services nationwide to make life with arthritis easier and less painful and to help you become an active partner in your own health care.

Contact us at (800) 283-7800 or visit us on the Web at [www.arthritis.org](http://www.arthritis.org) to become an Arthritis Advocate or to find out how you can become involved.

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**For more information:** The Arthritis Foundation offers a wide variety of books, brochures and videos about different forms of arthritis, treatment and self-management techniques to help you take control of your arthritis. To order any of these products, become an Arthritis Foundation member or to subscribe to the Arthritis Foundation's award-winning consumer health magazine, *Arthritis Today*, call (800) 283-7800. Call or visit our Web site ([www.arthritis.org](http://www.arthritis.org)) to find out how you can take control of your arthritis and start living better today!

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#### MISSION STATEMENT:

The mission of the Arthritis Foundation is to improve lives through leadership in the prevention, control and cure of arthritis and related diseases.

This brochure has been reviewed by the  
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