

FAST FACTS:

SÉZARY SYNDROME (SS)

What is Sézary Syndrome?

The two most common types of cutaneous T-cell lymphomas (CTCL) are mycosis fungoides, which is often indolent, appears as reddish skin patches and can progress over many years, and an advanced and leukemic form of mycosis fungoides called Sézary syndrome. Sézary syndrome is distinguished from mycosis fungoides by the presence of malignant lymphocytes in the blood and is characterized by extensive thin red, itchy rashes covering over 80 percent of the body. In some cases, thicker, red patches (or plaques) and tumors may also appear. In addition, these symptoms may be accompanied by changes in the nails, hair or eyelids or the presence of enlarged lymph nodes.

There are about 3,000 new cases of mycosis fungoides each year in the U.S. and approximately 15 percent of those are diagnosed as Sézary syndrome. Although this type of NHL can affect people of any age, Sézary syndrome usually occurs in adults ages 50 and over and is slightly more common in men than women. There are no known risk factors for this type of cutaneous T-cell lymphoma.

How Sézary Syndrome is Diagnosed and Staged

Many of the same procedures used to diagnose and stage other types of cutaneous T-cell lymphomas are used in Sézary syndrome, including a physical exam and history; blood tests to identify antigens, or markers, on the surface of the cells in the blood; a skin and/or lymph node biopsy (removal of a small piece of tissue) for examination under the microscope by a pathologist (a doctor who studies tissues and cells to identify diseases); and a series of imaging tests such as CT (computerized axial tomography), MRI (magnetic resonance imaging) and/or PET (positron emission tomography) scans to determine if the cancer has spread to lymph nodes or other organs. In addition to these diagnostic tests, occasionally a bone marrow biopsy may be necessary to verify complete staging.

Because mycosis fungoides and Sézary syndrome are such rare cancers, it is important to confirm a diagnosis by a dermatopathologist or a hematopathologist, a pathologist

who is an expert in diagnosing lymphomas.

The following staging system is used to determine the extent of mycosis fungoides:

- Stage IA—Less than 10 percent of the skin is covered in red patches and/or plaques.
- Stage IB—Ten percent or more of the skin surface is covered in patches and/or plaques.
- Stage IIA—Any amount of the skin surface is covered with patches and/or plaques; lymph nodes are enlarged, but the cancer has not spread to them.
- Stage IIB—One or more tumors are found on the skin; lymph nodes may be enlarged, but the cancer has not spread to them.
- Stage III—Nearly all of the skin is reddened and may have patches, plaques or tumors; lymph nodes may be enlarged, but the cancer has not spread to them.
- Stage IVA—Most of the skin area is reddened and there is involvement of the blood with malignant cells or any amount of the skin surface is covered with patches, plaques or tumors; cancer has spread to the lymph nodes and the lymph nodes may be enlarged.
- Stage IVB—Most of the skin is reddened or any amount of the skin surface is covered with patches, plaques or tumors; cancer has spread to other organs; and lymph nodes may be enlarged whether cancer has spread to them or not.

How Sézary Syndrome is Treated

There are many effective therapies available to treat Sézary syndrome. Because the disease is chronic and systemic (affecting the entire body), Sézary syndrome is usually not treated with skin-directed therapies alone. The specific treatment for individual patients is based on a variety of factors, including the patient's general health and stage of the disease.

There are several types of standard treatment for Sézary syndrome:

- Biologic, or immunotherapy, therapy is a treatment used to stimulate a patient's own immune system to fight the cancer
- Chemotherapy, a drug given either orally or through an infusion in a vein, to stop the growth of rapidly dividing cancer cells



- Extracorporeal photopheresis (ECP), a procedure used to expose the blood to ultraviolet light
- Histone deacetylase inhibitors, a class of drugs that cause a chemical change that stops tumor cells from dividing
- Phototherapy, for example, the drug psoralen and ultraviolet-A light radiation (PUVA) directed to the skin or skin-directed ultraviolet-B (UVB) or narrow band ultraviolet-B (NBUVB)
- Radiation therapy, which uses high-energy X-rays or other types of radiation to kill cancer cells or keep them from growing
- Retinoids, which are drugs related to vitamin A and can slow certain types of cancer cells

Some specific drugs include:

- Alemtuzumab (Campath), a monoclonal antibody
- Bexarotene (Targretin), a retinoid
- Gemcitabine (Gemzar), an antimetabolite chemotherapy
- Interferon alfa or interleukin-2, immune stimulants that bind to specific cell-surface receptors
- Liposomal doxorubicin (Doxil), a chemo therapy that binds to DNA
- Methotrexate (Trexall), an antimetabolite chemotherapy, which blocks the metabolism of cells
- Romidepsin
- Vorinostat (Zolinza), a histone deacetylase inhibitor

Some common combination therapies include:

- Bexarotene (Targretin) and interferon alpha
- Bexarotene and phototherapy
- ECP (extracorporeal photopheresis) and bexarotene
- ECP and interferon alpha ECP, interferon alpha and bexarotene
- Phototherapy and interferon alpha

Some second-line chemotherapies for relapsed (the recurrence of disease) or refractory (disease that is resistant to treatment) patients include:

- Bexarotene (Targretin) and denileukin difitox (Ontak)
- Chlorambucil (Leukeran)
- Cyclophosphamide (Cytosan)
- Pentostatin (Nipent)

Prognosis

Sézary Syndrome is an aggressive type of cutaneous lymphoma and promptness in seeing a physician and starting therapy are important to ensure the best possible prognosis.

Participating in Clinical Trials

Clinical trials are crucial in identifying effective drugs, prognostic strategies and determining optimal doses for lymphoma patients. Because mycosis fungoides and Sézary syndrome are such rare diseases, finding enough

patients to enroll in clinical trials is often difficult. If you are interested in participating in a clinical trial, talk to your doctor about an appropriate trial for you. To learn more about clinical trials, visit the Cutaneous Lymphoma Foundation at www.clfoundation.org.

Are Complementary and Alternative Therapies Safe and Effective?

Complementary and alternative medicines are nonstandard therapies that may help patients cope with their cancer and its treatment, but that should not be used in place of standard treatment. No alternative therapy has ever been proven effective against lymphoma. However, complementary therapies such as meditation, yoga, acupuncture, exercise, diet and relaxation techniques have been shown to be effective in combating some treatment side effects. Before embarking on any complementary therapies, patients should discuss the matter with their healthcare team. Certain unproven treatments, including some herbal supplements, can interfere with standard lymphoma treatments or may cause serious side effects.

How to Prepare for Follow-up Treatments

It is important for patients both during and after treatment to be proactive in their healthcare, including keeping a master file of medical records, asking questions, reporting new symptoms, exercising and eating a balanced diet. In addition, patients who smoke should strongly consider stopping. Follow-up visits for people with Sézary syndrome often depends on the stage of the disease and treatment and can range from as frequently as every few weeks when starting new therapies that require monitoring to as little as every six months.

Typically, follow-up visits include physical examinations, blood tests and occasionally imaging tests such as CT or PET scans. Besides determining disease recurrence, follow-up care can help identify and resolve unusual side effects of treatment.

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