

## SWOLLEN LYMPH NODES

### What is a swollen lymph node?

A lymph node is a small, round or bean-shaped cluster of cells covered by a capsule of connective tissue. The cells are a combination of lymphocytes — which produce protein particles that capture invaders, such as viruses — and macrophages, which break down the captured material.

Lymphocytes and macrophages filter your lymphatic fluid as it travels through your body and protect you by destroying invaders.

Lymph nodes are located in groups, and each group drains a specific area of your body. You may be more likely to notice swelling in certain areas, such as in the lymph nodes in your neck, under your chin, in your armpits and in your groin. The site of the swollen lymph nodes may help identify the underlying cause.

The most common cause of swollen lymph nodes is an infection, particularly a viral infection, such as the common cold.

### What causes swollen lymph nodes?

Swollen lymph nodes usually occur as a result of exposure to bacteria or viruses. When swollen lymph nodes are caused by an infection, this is known as **lymphadenitis**. Rarely, swollen lymph nodes are caused by cancer.

Your lymph nodes, also called lymph glands, play a vital role in your body's ability to fight off infections. They function as filters, trapping viruses, bacteria and other causes of illnesses before they can infect other parts of your body. Common areas where you might notice swollen lymph nodes include your neck, under your chin, in your armpits and in your groin.

In some cases, the passage of time and warm compresses may be all you need to treat swollen lymph nodes. Treatment of lymphadenitis depends on the cause.

### What are symptoms?

Your lymphatic system is a network of organs, vessels and lymph nodes situated throughout your body. Many lymph nodes are located in your head and neck region. Lymph nodes that frequently swell are in this area, as well as in your armpits and groin area.

Swollen lymph nodes are a sign that your immune system is working. When your lymph nodes first swell, you might notice:

- Tenderness and pain in the lymph nodes
- Swelling that may be the size of a pea or kidney bean, or even larger in the lymph nodes

### How is it diagnosed?

Often, history and physical exam is all that is needed to evaluate a lymph node. Rarely other tests are needed such as:

- **Blood tests**  
Depending on what your doctor suspects is causing your swollen lymph nodes, certain blood tests may be done to confirm or exclude the suspected underlying condition. The specific tests will depend on the suspected cause, but most likely will include a complete blood count (CBC).

This helps evaluate your overall health and detect a range of disorders, including infections and leukemia.

- **Imaging studies**

A chest X-ray or computerized tomography (CT) scan of the affected area may help determine potential sources of infection or find tumors.

- **Lymph node biopsy**

Your doctor may have you undergo a biopsy. He or she will remove a sample from a lymph node or even an entire lymph node for microscopic examination.

### **How is it treated?**

Swollen lymph nodes caused by a virus may return to normal after the viral infection resolves. Antibiotics are not useful to treat viral infections. Treatment for swollen lymph nodes from other causes depends on the cause:

- **Infection**

Perhaps than not common reason for lymph node enlargement are infections of various kinds. The most common treatment for swollen lymph nodes caused by a bacterial infection is antibiotics. Viral infection and response to insect bites are also common reasons for enlarged lymph nodes.

### **When to see a doctor**

Some swollen lymph nodes return to normal when the underlying condition, such as a minor infection, gets better. See your doctor if you're concerned or if your swollen lymph nodes:

- Have appeared for no apparent reason
- Continue to enlarge or have been present for two to four weeks
- Feel hard or rubbery, or don't move when you push on them
- Are accompanied by persistent fever, night sweats or unexplained weight loss

**Seek immediate medical care** if you're having difficulty swallowing or breathing.