Vasculitis

The word “vasculitis” means inflammation of blood vessels. Blood vessels include the huge network of arteries and veins that deliver blood from the heart to all of the organs and tissues throughout the body and then return the blood back to the heart. Blood vessels range in size from very large (e.g., the aorta, the body’s largest artery which carries blood from the heart) branching out to very small (e.g., capillaries that bring oxygen to the body’s tissues).

The inflammation caused by vasculitis can affect the lining of the blood vessels (called the endothelium) or the wall of an artery or vein. This can cause the vessel to become thickened, weakened, narrowed (stenosis), blocked (occlusion), enlarged (aneurysm), or scarred. A damaged vessel may not function normally, which can affect blood flow to the tissues that the vessel normally serves. This can lead to partial or complete organ failure due to lack of blood flow, or bleeding into the skin or other part of the body due to rupture of the blood vessel wall. This damage is sometimes permanent.

Some types of vasculitis resolve without treatment, while others require lifelong treatment with medicine. Fortunately, treatments can usually control or minimize vessel damage in the short term. However, both short- and long-term side effects of these treatments are common. Furthermore, relapses of vasculitis (also known as “flares”) are also common. It is extremely important that patients with vasculitis see their doctor or nurse on a regular basis.

VASCULITIS CAUSES

In most cases, the cause of vasculitis is unknown. A combination of factors likely sets the inflammatory process in motion.

- Vasculitis can occur in conjunction with another illness, such as lupus or rheumatoid arthritis.
- Vasculitis can develop as a reaction to certain drugs or other substances (called drug-induced vasculitis).
- Vasculitis can also occur as a result of infection such as the following viruses: hepatitis B or C, HIV (the virus that causes AIDS), cytomegalovirus, Epstein-Barr virus, or parvovirus B19. Vasculitis can also occur with some infections caused by bacteria.
The group of diseases labelled as “vasculitis” often refers to several types of vasculitis with no obvious cause, also known as “idiopathic” vasculitis.

VASCULITIS SYMPTOMS

Symptoms of vasculitis vary from one person to another and depend upon the type of vasculitis and location in the body of inflamed vessels. Some common symptoms include:

- Fatigue or weakness
- Fever
- Muscle and joint pain
- Rash
- Lack of appetite and weight loss
- Abdominal pain
- Kidney problems (bloody or dark-coloured urine)
- Nerve problems (numbness, weakness, pain)

VASCULITIS DIAGNOSIS

It can be difficult to diagnose vasculitis because the symptoms are similar to those caused by a number of other illnesses. Your doctor or nurse will talk to you, will perform a physical exam, and may order tests to help establish a diagnosis.

The tests used to diagnose vasculitis depend on the type of vasculitis that is suspected and may include blood or urine tests, imaging tests (like X-ray or magnetic resonance imaging [MRI]), nerve testing, or lung function testing. A biopsy is often required to be sure of the diagnosis before starting treatment.

VASCULITIS TREATMENT

The treatment of vasculitis will depend on the specific type of vasculitis and the areas of the body that are involved.

General measures - Treatment may include one or more of the following approaches.

- Glucocorticoids (also called “steroids”), such as prednisone, can be taken by mouth (as a pill) in most cases; high doses may be given into a vein. Because there are risks when glucocorticoids are taken for long periods of time, the goal is to take them only as long as needed.

Some people require treatment with long-term glucocorticoids to control symptoms and prevent worsening of their condition. Close monitoring for possible side effects of glucocorticoids, such as diabetes, weight gain, or osteoporosis (bone thinning), is needed.
There are medicines that can reduce the risk of bone fractures for people who take long-term glucocorticoids

- Additional treatment (beyond glucocorticoids) that suppresses the immune system might be needed for more serious types of vasculitis. One type of immunosuppressive medication, cyclophosphamide, has dramatically improved the outlook for people with some types of vasculitis.

Azathioprine, methotrexate, and mycophenolate are medicines that also suppress the immune system but are not as strong as cyclophosphamide. These treatments can be used for less severe forms of vasculitis and as maintenance therapy after treatment with cyclophosphamide.

- A newer set of medications, called “biologics,” are increasingly being used to treat some forms of vasculitis. These newer drugs include rituximab, tocilizumab, and anti-tumour necrosis factor (TNF) medications.

- All immunosuppressive medications have the potential to increase the risk of infections, and each type of medication has other important side effects that must be monitored for by a doctor.

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