

# Vasculitis

Vasculitis are a group of rare diseases which are associated with the inflammation of blood vessels. This occurs due to change in blood vessel walls like scarring, thickening, narrowing and weakening further leading to blockage in blood flow resulting in tissue and organ damage. Vasculitis usually affects one organ or can affect many organ systems and the condition can be short term or long lasting. This condition is also termed as Angiitis or Arteritis.



## VASCULITIS AWARENESS MONTH MAY 2020



Vasculitis, also called Angiitis or Arteritis



A group of Rare Diseases associated by inflammation of blood vessels; occurring in less than 1 million individuals per year in India. It is basically caused due to the changes in blood vessel walls which include the narrowing, thickening, scarring and weakening.

This further causes damage in the vessels thus restricting the blood flow leading to organ and tissue damage.

Causes are still unknown, occurs maybe due to allergic reactions to a medication, infections, blood cancer and immune system diseases. It can affect anyone. However, it can be treated and cured.



### TYPES OF VASCULITIS:

- Behcet's Disease
- Buerger's disease
- Churg-Strauss syndrome
- Cryoglobulinemia
- Giant cell arteritis
- Granulomatosis with polyangiitis
- Henoch-Schonlein purpura
- Hypersensitivity vasculitis
- Kawasaki disease
- Microscopic polyangiitis
- Polyarteritis nodosa
- Takayasu's Arteritis
- Rheumatoid Vasculitis
- Polymyalgia Rheumatica

For more resources, visit: <https://www.mayoclinic.org/diseases-conditions/vasculitis/symptoms-causes/syc-20363435>  
<https://www.hopkinsvasculitis.org/vasculitis/symptoms-vasculitis/>  
<https://medlineplus.gov/vasculitis.html>

Website: [www.ordindia.in](http://www.ordindia.in)

Contact number: +91 8892 555 000

Figure 1: Vasculitis

### Symptoms:

- **General:** the common symptoms observed are fatigue, fever, weight loss and night sweats.
- **Brain:** stroke, headaches, numbness, weakness and tinnitus (ringing in the ears) are observed in those suffering from Vasculitis. They also have a difficulty in co-ordination skills and often have a change in the mental status.
- **Eyes:** those suffering from Angiitis often suffer from acute visual loss, reduced vision, conjunctivitis (pink eye), retinal problems and thinning of sclera.

- **Sinus, nose and ears:** chronic sinus congestion, hearing loss, inflammation of nasal septum and also collapse of the bridge of the nose.
- **Lungs:** shortness of breath, cough (sometimes coughing of blood), pneumonia (in some cases), development of cavities are seen in the lungs, lung infiltrates and bleeding of the nose.
- **Heart:** high blood pressure and more prone to heart attacks and also occurrence of gangrene due to lack of blood flow.
- **Gastro-intestinal tract:** abdominal pain, bloody diarrhoea and perforation in the GI tract.
- **Muscles and joints:** joint pain, arthritis, body ache and inflammation of muscles.
- **Kidneys:** inflammation of glomeruli, loss of protein in the urine and renal insufficiency are observed.
- **Genitals:** red, round and ulcerated lesions (in some types).
- **Skin:** rashes, palpable purpura (purplish-red spots), livedo reticularis (purplish discoloration of skin).



## VASCULITIS AWARENESS MONTH MAY 2020



Vasculitis, also called Angiitis or Arteritis

Vasculitis is a group of disorders where there is inflammation of blood vessels observed. It is basically caused due to change in the blood vessel walls which include narrowing, thickening, scarring and weakening. This damages the blood vessels and restrict blood flow leading to organ and tissue damage.

### EYES

Acute visual loss, thinning of sclera, retinal problems, reduced vision, conjunctivitis (pink eye).

### SKIN

Rashes, palpable purpura (purplish-red spots), livedo reticularis (purplish discoloration of skin).

### GASTRO-INTESTINAL TRACT

Perforation in the GI tract, abdominal pain, bloody diarrhoea.

### MUSCLES AND JOINTS

Inflammation of muscles, body ache, joint pain, arthritis.

### GENERAL

Fever, fatigue, weight loss, night sweats.



### GENITALS

Red, round, ulcerated lesions (in some types).

### BRAIN

Headache, stroke, numbness, weakness, difficulty with co-ordination, change in mental status, tinnitus (ringing in the ears).

### LUNGS

Cough (sometimes blood), shortness of breath, development of cavities observed in the lungs, pneumonia (some cases), nose bleeds, lung infiltrates.

### HEART

High blood pressure, heart attacks, gangrene (due to lack of blood flow).

### KIDNEYS

Loss of protein in the urine, renal insufficiency, inflammation of glomeruli observed.

For more resources, visit: <https://www.hopkinsvasculitis.org/vasculitis/symptoms-vasculitis/>,  
<https://medlineplus.gov/vasculitis.html>,  
<https://www.mayoclinic.org/diseases-conditions/vasculitis/symptoms-causes/syc-20363435>

Website: [www.ordindia.in](http://www.ordindia.in)

Contact number: +91 8892 555 000

Figure 2: Symptoms of vasculitis

## Cause:

Exact cause of vasculitis is not yet known. However, it is believed that some types are associated with a person's genetic makeup and some also occur due to defect in immune system where the blood vessel cells are attacked by the immune system. Some of the possible reasons are-

- Blood cancers
- Reaction to particular drugs
- Hepatitis B and Hepatitis C
- Immune system diseases like lupus, scleroderma and rheumatoid arthritis

Inflammation of blood vessels is seen which cause thickening of layers of blood vessel wall and in turn narrow the blood vessels, resulting in less blood flowing and decreases the amount of oxygen and essential nutrients reaching our tissues and organs.

## Affected population:

This rare disease occurs in less than one million individuals per year in India.

It can affect any sex or race at any age. Individuals who smoke, have chronic hepatitis B or C infections and suffer from auto immune conditions are at more risk of getting affected.

## Types:

- **Churg-Strauss syndrome**-lungs, skin, kidneys, heart and nerves in limbs affected. Signs to look out for-skin changes, nerve pain, nasal allergies and asthma.
- **Behcet's disease**-inflammation of veins and arteries. Signs to look out for-eye inflammation, acne, skin lesions and ulcers in mouth and genitals.
- **Beurger's disease**-formation of clots and inflammation in the blood vessels present in hand and feet, causes ulcers and is painful. It can also affect blood vessels in the brain, abdomen and heart.
- **Giant cell arteritis**-condition where there is swelling in the arteries present in the head close to the temples. Common signs are jaw pain, headaches, scalp tenderness, blurred vision and can lead to loss of vision.
- **Cryoglobulinemia**-this occurs when there is abnormal level of proteins in the blood. Signs are -rash, joint pain, weakness, numbness and tingling.
- **Granulomatosis with polyangiitis**-swelling can occur in the blood vessels present in the nose, sinuses, throats, lungs and kidneys. Common symptoms-nasal stuffiness, sinus infections, nose bleeding, etc.
- **Hypersensitivity vasculitis**-Common signs observed are rashes on lower legs. It is known as allergic vasculitis.

- **Henoch-Schonlein purpura**-observed more in children and known as IgA vasculitis and leads to swelling in the capillaries, joints, kidneys and bowel. Common symptoms are blood in urine, joint pain, rashes on lower parts of the body and abdominal pain.
- **Kawasaki disease**-children below age 5 are more prone to this disease and the common signs to look out for are rash and redness in the eyes, fever.
- **Microscopic polyangiitis**- attacks small blood vessels in the nerves, lungs and kidneys and the symptoms are rashes, fever, weight loss and muscle pain.
- **Takayasu's arteritis**- larger arteries in the body like aorta are affected causing high blood pressure, loss of pulse, headaches, appetite loss, night sweats and fever.
- **Polyarteritis nodosa**- the organs affected here are the kidneys, nerves, digestive tract and skin. Common symptoms are high blood pressure, muscle and joint pain, abdominal pain, weight loss, rashes and kidney problems.
- **Rheumatoid vasculitis**- causes swelling in small and medium sized blood vessels. It mostly affects vessels present in the skin, nerves, fingers and toes, eyes and heart.
- **Polymyalgia rheumatica**- mainly affects the muscles present around shoulders and hips and causes muscle pain and stiffness and can lead to serious condition where there is inflammation of lining of the arteries known as temporal arteritis.

### Diagnosis:

- **Blood test:** this test is performed to look out for high levels of C- reactive protein, signs of inflammation in blood vessels and also detects certain antibodies -anti-neutrophil cytoplasmic antibodies test which is useful to diagnose vasculitis.
- **Urine tests:** checks the count of red blood cells in the urine and also detects the levels of protein in the urine.
- **X ray tests:** performed on blood vessels, also known as angiography- mainly used to detect narrow, blocked and malformed arteries of veins in different parts of the body.
- **Imaging tests:** common tests conducted are X-rays, CT scan, MRI scan, PET scan and these determine which blood vessels and organs are affected.
- **Biopsy:** here the doctor removes a sample of the tissue which is affected by surgery and further examines it for any signs of vasculitis.

### **Treatments:**

Medications like Medrol, Prednisone, which are corticosteroid drugs are given to control the inflammation. Usually the medication is given based on the type and severity of the vasculitis condition the patient suffers from. Biological therapies like Rituxan and Actemra are also suggested for treatment.

Surgery includes treating of aneurysm-balloon like bulge formed in the wall of a blood vessel as well as blocked arteries.

### **Other names for this condition:**

- Vasculitides
- Angiitis
- Arteritis

### **References:**

- <https://www.mayoclinic.org/diseases-conditions/vasculitis/symptoms-causes/syc-20363435>
- <https://www.webmd.com/rheumatoid-arthritis/guide/vasculitis-treatment>
- <https://www.hopkinsvasculitis.org/vasculitis/symptoms-vasculitis/>