



10 THINGS TO KNOW ABOUT VASCULAR AND LYMPHATIC ANOMALIES

SIMILARITIES AND DIFFERENCES

01

VASCULAR ANOMALIES ARE CLASSIFIED INTO TWO MAJOR GROUPS: TUMORS AND MALFORMATIONS

Vascular anomalies encompass a diverse spectrum of disorders comprising blood vessels from the circulatory system, which may involve arteries, veins, lymphatics, capillaries, or a combination thereof. The *International Society for the Study of Vascular Anomalies (ISSVA)* is responsible for the standard classification of vascular anomalies.

02

VASCULAR TUMORS ARE FORMED FROM BLOOD VESSELS

Vascular tumors are a group of tumors that originate from blood vessels in the body and are present in skin, soft tissues, organs, and bones. Vascular tumors are different from vascular malformations, although both may sometimes occur in one person. Benign vascular tumors will resolve on their own and do not cause any harm. However, malignant vascular tumors, such as vascular cancers, can create serious health problems.

03

VASCULAR MALFORMATIONS ARE THE GROWTH OF ABNORMALLY FORMED ARTERIES, VEINS, LYMPHATICS, OR CAPILLARIES

There are several different types of vascular malformations, and they are named based on the specific type of blood vessel involved such as lymphatic malformation. Vascular malformations are present at birth and enlarge with the child's growth until puberty or pregnancy, when they grow more than the rest of the body.

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COMPLEX VASCULAR ANOMALIES ARE ALSO KNOWN AS COMBINED VASCULAR ANOMALIES

Complex or combined vascular anomalies can occur anywhere in the body, including the skin, muscles, bones, or internal organs. Sometimes, people living with complex vascular anomalies may also have overgrowth of affected parts of the body.

05

LYMPHATIC ANOMALIES ARE DIAGNOSED WHEN A VESSEL ABNORMALITY ONLY INVOLVES LYMPHATICS

A lymphatic anomaly is the growth of abnormal lymph vessels that leads to fluid-filled lymphatic tissue that gathers and collects. And just like vascular anomalies, they can be classified as a tumor or malformation. Lymphatic tumors include kaposiform hemangio-endothelioma and lymphangiosarcomas. Lymphatic malformations are benign anomalies made up of abnormal lymphatic vessels that are non-cancerous and are most common in the head and neck. However, they may develop anywhere in the body.

06

THERE ARE FOUR SUB-TYPES OF COMPLEX LYMPHATIC ANOMALIES

The hallmark of complex lymphatic anomalies is the abnormal development and proliferation of lymphatic vessels that form cysts, masses, and/ or tumors anywhere in the body, in bones and organs. The four sub-types of complex lymphatic anomalies include generalized lymphatic anomaly, Gorham-Stout disease, central conducting lymphatic anomaly, and kaposiform lymphangiomatosis.

07

SYMPTOMS OF COMPLEX LYMPHATIC ANOMALIES DEPEND ON LOCATION AND SIZE

Common symptoms include soft compressible lumps or swellings, visible skin discoloration, recurrent infections such as pneumonia, pain, decreased appetite, shortness of breath, fatigue, problems with mobility, or difficulty in the functioning of a limb, a fluid collection that occurs in the chest and/or belly, and possible bleeding or formation of blood clots, swelling of an extremity possibly leading to lymph leaking from the skin and other areas.

08

DOCTORS CAN STRUGGLE TO DIAGNOSE COMPLEX LYMPHATIC ANOMALIES

Diagnosing complex lymphatic anomalies can be challenging due to their rarity, symptom overlap with common diseases, limited exposure for doctors, and the requirement of specialized diagnostic tests often accessible only in major city centers.

09

COMPLEX LYMPHATIC ANOMALIES ARE TREATABLE

While complete cures do not exist and only partial treatments are available, there are various approaches to enhance the quality of life and provide relief to people living with complex lymphatic anomalies. Treatment options may include interventional radiology, which involves embolization to obstruct blood or lymphatic flow to the malformation, sclerotherapy to inject substances for vessel shrinkage, surgical removal employed cautiously by a multidisciplinary team, laser therapy, or utilization of an expanding selection of medications. These drugs are showing great promise and help to improve symptoms.

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THERE IS NO CURE FOR VASCULAR ANOMALIES AT THIS TIME

A complete cure for vascular anomalies is not available yet. However, various treatment modalities can help manage the symptoms, reduce the size of the malformation or tumor, and improve the overall quality of life for affected individuals. A vascular anomaly can cause significant health problems and complications. Complications may become life-threatening, including lung, heart, and abdominal fluid collections, recurrent infections, bleeding, blood clots, impaired organ function, lymphedema, or aesthetic concerns. Early diagnosis and appropriate treatment are critical for improved outcomes. Seek expert advice from specialists who deliver care for those living with a vascular anomaly.



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