What are the Blue Lines in My Arms?

By Noah K. R., a Scientist.

My topic is about what the blue lines are in my arms and why they are there. I am curious. Why? Because I am a scientist.

1. On my arm I can see blue lines and I am curious about them.

2. There are two lines, and they are both blue. How many veins are in my body?

3. Sometimes when I use an eraser the blue lines get bigger. When this pressure is applied, why do my veins get bigger?

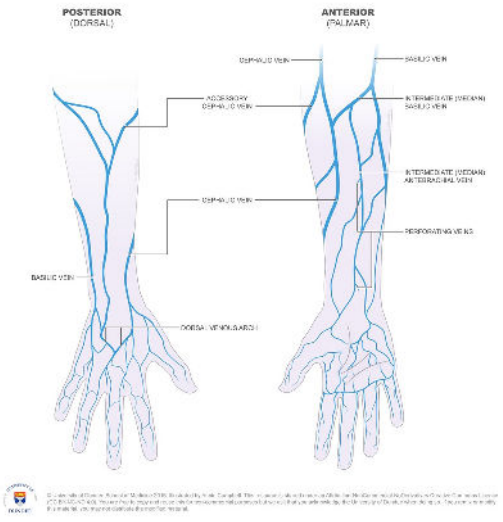
4. SO, what are these blue lines?

They are veins.

According to Britannica, “Veins, in human physiology, are any of the vessels that, with four exceptions, carry oxygen-depleted blood to the atrium (right upper chamber of the heart).

The four exceptions—the pulmonary veins—transport oxygenated blood from the lungs to the left upper chamber of the heart. The oxygen-depleted blood transported by most veins is collected from the networks of microscopic vessels called capillaries by thread-sized veins called venules.”

A capillary is any of the fine branching blood vessels that form a network between the arterioles and venules. Capillaries are the smallest – tiny - blood vessels in your body. Oxygen



passes through the walls of your capillaries to your tissues. Carbon dioxide can also move into your capillaries from the tissue before entering your veins.

An arteriole is a small branch of an artery leading into capillaries.

Venules are very small veins, especially one collecting blood from the capillaries. The venous system refers to the network of veins that work to deliver deoxygenated blood back to your heart.

Veins are different from your arteries, which deliver oxygenated blood from your heart to the rest of your body.

What are the different types of veins?

According to Healthline, there are three types of veins:

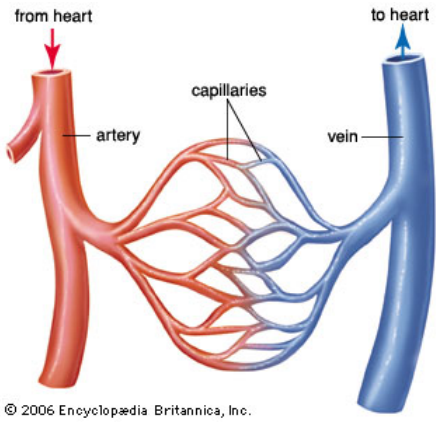
· Deep veins are located within muscle tissue. They have a corresponding artery nearby. · Superficial veins are closer to the skin's surface. They don't have corresponding arteries.

· Pulmonary veins transport blood that's been filled with oxygen by the lungs to the heart. Each lung has two sets of pulmonary veins, a right and left one.

· Systemic veins are located throughout the body from the legs up to the neck, including the arms and trunk. They transport deoxygenated blood back to the heart.

Veins are often categorized based on their location and any unique features or functions. HERE ARE RELATED TOPICS:

Cardiovascular disease:



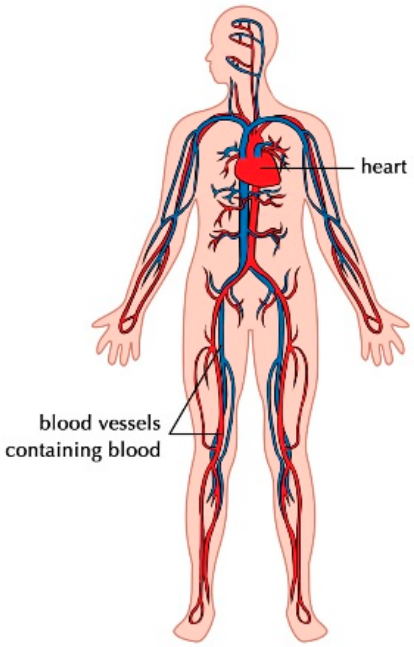
Cardiovascular disease can refer to a number of conditions: Heart Disease, heart attack, stroke, heart failure, arrhythmia and heart valve problems. Thank you heart.org

Phlebitis and Thrombophlebitis: Phlebitis refers to inflammation of a vein and it can be caused by any insult to the blood vessel wall, impaired venous flow, or coagulation abnormality. Thrombophlebitis refers to the formation of a blood clot associated with phlebitis. Thank you medicine.net.

Human cardiovascular system: The veins, venules collect blood from the capillaries and the blood channels known as sinusoids and unite to form progressively larger veins that terminate as the great veins, or venae cavae. In the extremities there are superficial and deep veins; the superficial lie just under the... Britannica thank you. This is a picture of a big veins.

What Do Blood Vessels Look Like?

Renal Veins: The renal veins are veins that drain the kidney. They connect the kidney to a large vein carrying deoxygenated blood into the heart. Thank you Oxford Dictionaries.



The three types of blood vessels not only have different functions, they also appear in different areas of the body and are made of different elements.

For example, a vein is made up of three layers. The outermost layer of a vein is made of connective tissue and the inner layers consist of smooth muscle-like fibers. The layer on the inside of a vein is where the blood travels through, also known as the lumen.

Source: https://www.usaveinclinics.com/blog/how-many-veins-human-body/ This is the inside of a vein.

I am a curious scientist.

So, in closing, I wondered why my veins are blue and blood is red. And then I found this: According to lifescience.com, “Blood is always red, actually. Veins look blue because light has to penetrate the skin to illuminate them, blue and red light (being of different wavelengths) penetrate with different degrees of success. What makes it back to your eye is the blue light.”

And as to why when I erase the blue lines get bigger, I was unable to find any information about it.