

Similarities in angiology

Similitudes em angiologia

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ABSTRACT

Popular terms and expressions used to explain phenomena and structures found in Angiology are described, bringing Medicine closer to everyday human life and making it easier to understand.

Key words: Angiology; Education Medical; Terminology as Topic.

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RESUMO

São descritos verbetes ou expressões populares usados para melhor explicar os fenômenos e as estruturas encontradas em Angiologia, de forma a trazer para a Medicina o usual da vida humana, para tornar fácil e prática a sua compreensão.

Palavras-chave: Angiologia; Educação Médica; Terminologia como Assunto.

INTRODUCTION

It is human nature to compare everything it sees. By comparing we understand and memorize life. In this way it is easier to interact with the world in which we live. Comparisons serve to explain and have been used since Jesus Christ, who was famous for his parables. Similarities can be found in Angiology and also in other medical specialties, as Andrade well reports.¹

THE MOUSE FIGURE

The movie industry has created various animal characters that behave like humans. The figure of the famous Mickey Mouse, created by Walt Disney (Picture 1), can be found in the human groin when examined by venous Doppler sonography, and is made up of the femoral vein and artery and the great saphenous vein. The mouse's head is represented by the larger caliber of the femoral vein and the ears are represented by the femoral artery to its side and the great saphenous vein placed slightly above. It is one of the first images memorized by the ultrasound apprentice.

It helps locate in the saphenofemoral junction region an important point to check the flow and eventual blood reflux in the venous network.

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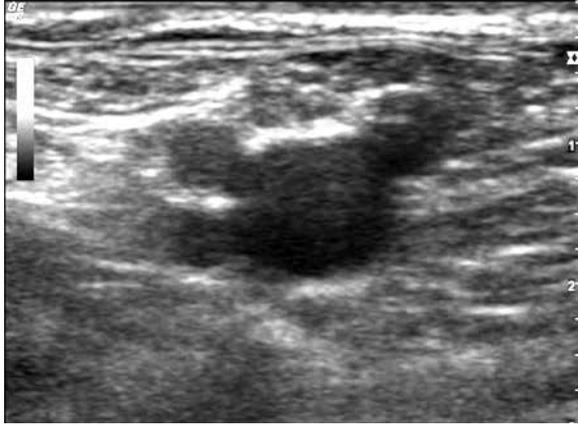


Figure 1 - Echo Doppler image of inguinal vessels. Source: provided by Dr. Adriano de Souza.

EYE OF HORUS – THE EGYPTIAN EYE

Horus was the Egyptian god of the sky, son of Osiris and Isis. He had a falcon's head and the eyes represented the sun and the moon. The Eye of Horus is a symbol from Ancient Egypt that stands for protection and power.

A curious similarity can be found between the various fascias involving the great saphenous or small saphenous veins in the lower limbs (Pictures 2 and 3). The saphenous fascia, in front of the saphenous canal, and the fascia lata, behind it, form the contour of the Eye of Horus. The pupil is the saphenous vein. This similarity led to the image on the cover of the most famous book on foam sclerotherapy, *La Sclerotherapie*² by Gobin JP and Benigni JP.



Figure 2 - Saphenous vein between aponeuroses.

BLACK PEARL

Pearls are usually white. They are made by clams and oysters from a grain of sand. Black pearls are the rarest found in nature. They can be grown from *Pinctada*

Margaritifera, also known as black-lip oyster. For a black pearl to be generated, a nucleus of another mollusk must be inserted in the oyster. The mollusk will get irritated by the foreign body and cover its core with black nacre.



Figure 3 - Cover figure of the book *La Sclerotherapie: The Eye of Horus*.²

In the human body, when a dermal vein dilates, it becomes an aneurysm and takes the shape of a black pearl, that is, a round shape. Such small aneurysms are very frail spots that can rupture and produce significant bleeding. Imagine such bleeding inside a bathroom when the person is showering. The blood will flow unnoticed because it has the same temperature as the shower water. It can lead to so much blood loss that it will cause a fall in blood pressure, fainting and its unpleasant consequences. (Picture 4).

Today, such pearls can be treated with foam sclerotherapy and compression.



Figure 4 - Small aneurysm represented by the black pearl.

RUST

Hyperpigmentation is typical of people with chronic venous insufficiency. Dark spots appear in people who undergo surgical treatment or liquid or foam sclerotherapy. Hyperpigmentation, so-called rust, also arise in people who have not yet undergone treatment (Picture 5). They are caused by chronic venous insufficiency that can cause intravenous hemoglobin to migrate from the inside to the outside of the vein. In this case, the venous wall is more fragile and thin. The hemoglobin then becomes hemosiderin, which has tropism for the deepest skin layer, where it settles like a tattoo the color of rust, or iron oxide. The most serious cases are dermite ocre of Favre.

These spots tend to disappear when the chronic venous insufficiency is well controlled and through dermatological treatments. Small varicose veins can be seen under the venoscope and can be treated with LED light venoscope sclerotherapy.



Figure 5 - Hyperpigmentation with varicose veins.

TARGET BOARD

The reaction of a vein when subjected to sclerotherapy treatment is very interesting. The foam destroys the epithelium and adheres to the middle layer of the vein, which responds promptly with an edema visible using echo Doppler. This circular edema is not unlike a target practice board. The more central layers keep certain blisters and the outer layers show

the edema caused by the start of the healing reaction. In French, this is called “cocarde”. (Picture 6).

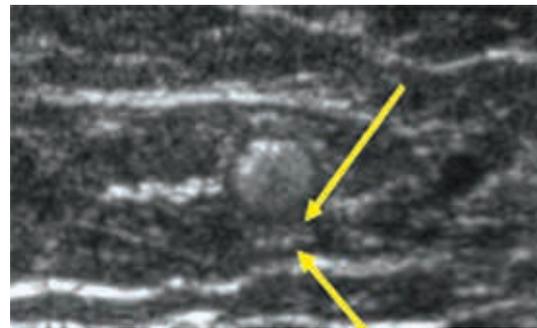


Figure 6 - Foam-treated vein showing edematous middle layer.

RUBY HEMANGIOMA, ALSO CALLED CHERRY HEMANGIOMA

A ruby is a red colored gemstone, a variety of the mineral corundum (aluminium oxide). The red color is caused mainly by the presence of the element chromium. It originates from Africa, Asia and Australia. The appearance of angiomatic lesions on the skin informs the name ruby hemangioma for its remarkable similarity with that stone (Picture 7).

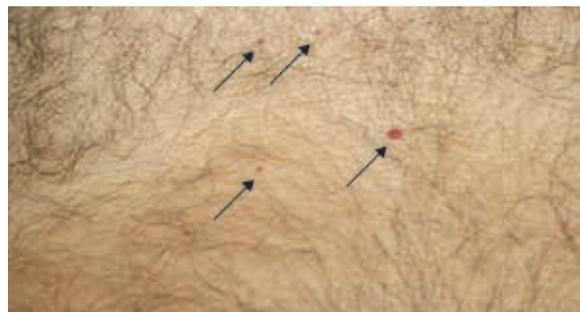


Figure 7 - Cherry or ruby hemangioma.

CONCLUSION

This account deviates from the rigor of science, but it intends to help teach Angiology and even Medicine as it makes explanations of pathophysiological phenomena in Angiology easier, which facilitates memorizing them. Images of mice, eyes, pearls and rust are related to the human body.

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