

Angiology – Echocolordoppler

For many years the diagnostic methods, based on the Doppler effect, have been prerogatives for a limited number of specialists who were basically just researching.

Since the union between the ultrasound and the Doppler method during the 70's, the field of the application got wider, allowing an extensive use of this diagnostic method that imposes itself in these last years as the Gold Standard (the best one) in the diagnosis of vascular diseases.

The echocolordoppler joins the ultrasound colour code method and the Doppler effect in order to allow a very accurate evaluation of the blood vessels, both arterial and venous.

It allows a very reliable evaluation of all the arteries and veins that pass in the subcutaneous layers, but also deep in the abdomen, for a very precise diagnosis. But above all it is not invasive! No injections, rays or other stuff.

Absolutely a harmless, repeatable and very accurate diagnosis.

It uses the ultrasound diagnosis, with the physical effect of the Doppler, adding the hemodynamic dimension: a corpse in movement (in our case the blood) makes the ultrasounds bounce according to determined laws that in the end are underlined on the screen.

It is useless to say that there are a lot and very useful indications:

- **Carotid and Trunks above the Aorta's echocolordoppler (TSA):** it allows a morphological and hemodynamic evaluation of the carotid and vertebral arteries, the ones that bring the blood to the brain. It is very useful for the prevention of cerebral arterial sclerotic disease and ictus. But also for the monitoring of surgical operations of revascularization.

- **Arterial and Lower Limbs' echocolordoppler:** it allows a careful evaluation of the arteries that bring the blood to the lower limbs consenting to diagnose enrapturing pathologies of the aorta and of the other arteries of the lower limbs (the aneurysms), that is when an artery becomes bigger.

But it is also useful to diagnose stenosing (that occlude) pathologies of the arteries of the lower limbs.

- **Abdominal venous and Lower Limb' echocolordoppler:** it allows a very accurate evaluation of the status of our veins, the vessels that bring the blood to the heart.

It is very useful for the diagnosis of phlebitis, but also for varices. By now it has absolutely become an essential exam before any operation of varices. It allows the so-called mapping of varices and it will allow the surgeon to know where exactly make the micro incisions through the ones he will cut and correct the dilated veins.

It is very useful also for the diagnosis of the varicocele, the dilated veins of the spermatic cord.

The advent of this diagnostic method has revolutionized the diagnosis of the vascular diseases and it has allowed a very big step forward in the prevention of very disabling diseases such as cerebral ictus or lower limbs' phlebothrombosis.