

Venopharmacy

Venopharmaceutical refers to a heterogeneous group of medication used for the therapy of venous diseases, in particular, **chronic venous insufficiency**. The essence of the effect is **increasing the tone of the venous wall**, which leads to a decrease in the lumen of the affected veins and an acceleration of the outflow of **blood** (slow blood flow is one of the main mechanisms of Thrombosis). They also have a positive effect on microcirculation, where they reduce the permeability and fragility of capillaries and improve lymphatic drainage. What's more, they prevent the appearance of edema and improve tissue trophism. Some of them have a mild anti-inflammatory effect (tribenoside, calcium dobesilate). In some polycomponents are added dehydrated ergot alkaloids (DH-ergocristine) for their arteriolodilatation, venotonic and capillarotonic effect. The group of venodrugs also includes **sclerosing agents**.



Varix on the right lower extremity

Indications

The main reasons are:

- primary and secondary venous insufficiency;
- swelling of the lower extremities of post-traumatic and lymphatic origin;
- microangiopathy (e.g. diabetic);
- increased fragility of capillaries;
- hemorrhoids.

Contraindications

Venopharmaceuticals are not supposed to be used during **pregnancy and lactation**. Only a combination of diosminol and hesperidin can be used.

Side effects

Of the side effects may occur:

- skin allergic reaction;
- mild indigestion;
- headache.

Venopharmacy

Seed extracts

Escin

It is a mixture of substances isolated from horse chestnut seeds. In addition to *venoprotective*, it particularly has **anti-edematous and anti-inflammatory** effects. Therefore, it is often used, among other things, in the treatment of traumatic and postoperative edema and in the treatment of vertebrogenic algic syndromes.

Rutin

Due to its supportive effect on the strength and permeability of capillaries, it is used as an adjuvant medication in the therapy of swelling and increased fragility of capillaries.

Semi-synthetic venopharmaceuticals

Tribenoside

It is taken orally in diseases of the veins of the lower extremities, as well as rectally (in the form of a suppository) in hemorrhoids.

Troxerutin

Can be taken orally and parenterally, for a beneficial effect on microcirculation it is used in microangiopathy (e.g. diabetic), adjuvant in leg ulcers.

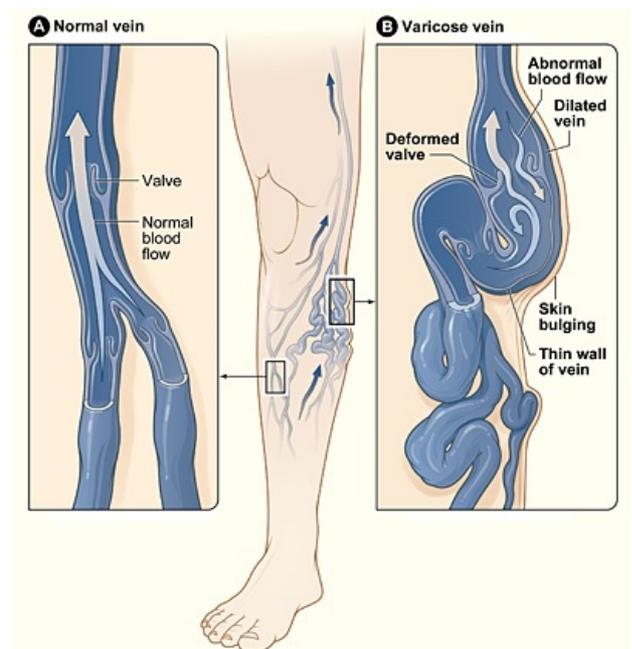


Diagram of varicose veins on the lower limb

Synthetic venopharmaceuticals

Calcium dobesilate

It has a significant effect on microcirculation. It also has an anti-inflammatory effect. Therefore, in addition to venous diseases, it is also used for pathological changes in microcirculation (diabetic retinopathy).

Sclerosing agents

After injection into the primary and secondary venous cities (varicose dilated veins), they lead to proliferation of connective tissue and subsequently to varicose veins obliteration. Polidocanol is used in 0.5–3% concentration .

Reference

Related articles

- Chronic venous insufficiency
- Primary and secondary venous insufficiency

Links

- Venofarmaka (česká wikipedie)

Source

- MARTÍNKOVÁ, Jiřina – MIČUDA, Stanislav – CERMANOVÁ, Jolana. *Vybrané kapitoly z klinické farmakologie pro bakalářské studium* [online]. ©2000. [cit. 2010-07-19]. <<https://www.lfhk.cuni.cz/farmakol/predn/bak/kapitoly/prednasky/kardio-bak.ppt/>>.