Varicose Veins in Pregnancy: Why they occur and what you can do

Up to 30-40% of all pregnant women develop visible varicose veins (varices) during pregnancy - and for many, the condition worsens with each subsequent pregnancy [1,2]. The good news is that a large proportion of these changes disappear again after giving birth, and that both prevention and treatment are safe and effective.

Why do pregnant women get varicose veins more often?

Three factors work together:

- **Increased blood volume.** During pregnancy, blood volume increases by 30-50%, which increases the pressure in the leg veins [3].
- **Hormonal changes.** Progesterone and oestrogen relax the blood vessel walls and dilate the veins - starting from the first trimester [4].

- **Mechanical pressure.** The growing uterus presses on the vena cava and pelvic veins, particularly on the right side, and impedes the return of blood from the legs [5].

In addition, there is a **hereditary predisposition** - if your mother or sister has varicose veins, your own risk increases significantly. Read more in Varicose veins and heredity.

Typical symptoms

- Heavy, tired legs at the end of the day
- Swelling around the ankles and feet
- Night cramps and restless legs
- Visible, winding veins on the thighs, calves and behind the knees
- Spider veins
- Vulval varicosities (varicose veins on the labia) - seen in ~10% of pregnant women [6]
- In rare cases: superficial blood clots (thrombophlebitis)

Please note: haemorrhoids are actually varicose veins in the blood vessels of the rectum - the same mechanism applies during pregnancy. Also read Haemorrhoids during pregnancy.

Prevention and relief

Almost everything can be done without medication or procedures:

- **Compression stockings** (Class 1-2) are the first-line choice. A Cochrane review shows that they reduce both symptoms and the development of new varicose veins during pregnancy [7]. Put them on in the morning before you get out of bed.
- **Exercise**: 30 minutes of walking daily activates the calf muscle pump.
- **Elevate your legs** above heart level for 15-20 minutes several times a day.
- **Lie on your left side** when you sleep - this relieves pressure on the vena cava.
- **Avoid standing or sitting still** for long periods without moving your feet.
- **Weight management** and a high-fibre diet help prevent both varicose veins and haemorrhoids.

What about medication? Phlebotonics (e.g. micronised diosmin/hesperidin) are NOT routinely recommended during pregnancy, as their safety has not been sufficiently documented [8].

When to contact a doctor

See a doctor if you have:

- A tender, red, and hard vein (possible superficial thrombophlebitis)
- A swollen, warm, and painful leg - this can be a sign of deep vein thrombosis (DVT), the risk of which is 5-6 times higher during pregnancy and the postpartum period [9]
- Skin changes at the ankle (brownish discolouration, eczema or ulcers)
- Sudden heavy bleeding from a ruptured superficial vein

Acute shortness of breath or chest pain → call 112 (on suspicion of a pulmonary embolism).

Treatment after childbirth

Most pregnancy-related varicose veins disappear or improve significantly within 3-6 months postpartum, as hormones, blood volume, and pelvic pressure return to normal [10]. Therefore, you should wait to have treatment until:

- **At least 3-6 months after giving birth**, so the actual need for treatment can be assessed
- **After you have finished breastfeeding** - especially before sclerotherapy or endovenous laser, as the effect of treatment on breast milk has not been fully studied

If symptoms or visible varicose veins persist, the following are offered:

- **Doppler ultrasound** to map valve function and reflux
- **Endovenous Laser Treatment (EVLT)** - a modern and gentle treatment with a 95% closure rate after 5 years [11]
- **Sclerotherapy** for smaller varicose veins and spider veins

- Only rarely, classic surgery

Will they return in a future pregnancy?

Yes, there is a risk. Previous pregnancies are an independent risk factor for new varicose veins, and approx. 30-50% of women with previous pregnancy-related varicose veins experience a worsening with their next pregnancy [2,12]. Treatment before a new pregnancy can therefore be a sensible option if symptoms are pronounced.

At our clinic, we are happy to see women who have been through a pregnancy for an ultrasound assessment and potential modern laser treatment under the public health insurance scheme.

References

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