

Sport and Physical Activity with Varicose Veins: What You Can Do and What You Should Avoid



Many patients with varicose veins (varices) are unsure whether they can continue to run, do strength training, or cycle long distances. The short answer is: **exercise is good for vein health** - but some activities are better than others, and correctly performed exercise can both prevent and relieve symptoms.

Why is exercise beneficial for the leg veins?

The blood in the legs returns to the heart through three mechanisms:

1. **The venous valve system** - small valves that prevent blood from flowing backwards
2. **The calf muscle pump** - contraction of the calf muscles "pumps" the blood upwards
3. **Negative pressure in the chest cavity** during inhalation

In varicose veins, the valve system is faulty, causing blood to flow backwards (reflux). This increases the pressure in the superficial veins and causes symptoms such as heaviness, swelling, and visible, twisted veins.

When the calf muscle pump is regularly activated, **the venous pressure is significantly reduced**, and symptoms are relieved. Studies have shown that people who walk and are physically active have a lower risk of developing and progressing chronic venous insufficiency [1,2].

The best forms of exercise for varicose veins

Highly recommended:

- **Walking** (at least 30 minutes daily) - the most effective form of exercise for the muscle pump [3]
 - **Cycling** - easy on the joints and activates the calf muscles without impact stress
 - **Swimming** - the hydrostatic pressure of the water acts like a natural compression stocking [4]
 - **Yoga and Pilates** - strengthens the pelvic floor and core, improves circulation
 - **Rowing and cross-trainer** - provides smooth resistance and good muscle pump action
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Sports where you should be cautious

These activities are not forbidden, but they can worsen symptoms if overdone or performed without care:

- **Long-distance running** on hard surfaces: The impact can increase the strain on your veins. Wear proper shoes and graduated compression stockings - several studies show that compression reduces both muscle vibration and symptoms in runners [5,6].
- **Heavy lifting (weightlifting, CrossFit, kettlebells)**: The Valsalva manoeuvre (straining while holding your breath) significantly increases intra-abdominal pressure and forces blood down into the leg veins. Remember to breathe throughout the entire lift and avoid "locking" your breath [7].

- **Static activities** (prolonged standing yoga poses, holding planks for long periods, stationary strength exercises): These lack dynamic muscle pumping action.

Good to know: A 2020 meta-analysis showed no increased risk of varicose vein progression in people who do strength training - as long as the Valsalva manoeuvre is minimised and compression is considered [8].

Practical advice for exercise

- **Wear graduated compression stockings** (Class 1-2) during exercise, especially for longer runs, long-haul flights, or standing workouts - they reduce swelling, soreness, and muscle fatigue [9]
 - **Elevate your legs** for 10-15 minutes after exercise to promote venous return
 - **Drink plenty of water** - dehydration worsens venous symptoms
 - **Vary your workouts:** combine cardio and strength training for the best effect
 - **Listen to your body:** fatigue and heaviness at the end of the day are normal; persistent pain, swelling, or discolouration should be investigated
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Special situations

- **After endovenous laser treatment (EVL)**, you can usually walk on the same day and resume normal exercise after 2-3 days. Heavy strength training and contact sports should typically be avoided for 1-2 weeks. Compression stockings are worn for 1-2 weeks after the procedure [10].
 - **After pregnancy:** wait to resume heavy training and high-intensity interval training until your pelvic floor has recovered (6-12 weeks). Walking and light cycling can be started soon after delivery.
 - **With active skin complications or venous ulcers:** avoid swimming pools and hot baths until the wound has completely healed.
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When should you contact a doctor?

See a doctor if you experience:

- A tender, red, and hard vein (possible superficial thrombophlebitis)
 - Sudden swelling, warmth, and pain in the leg - could be a deep vein thrombosis (DVT) [11]
 - Skin changes, brownish discolouration, or sores around the ankle
 - Pain during exercise that does not go away with rest
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Conclusion

You should **not** stop exercising because you have varicose veins - quite the opposite. The best prevention and relief come from regular dynamic exercise focusing on the muscle pump, using compression when needed, and employing a conscious technique during heavy lifting. Sport and varicose veins can certainly be combined, as long as you exercise wisely and know your own limits.

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