VARICOSE VEINS

What's the Problem, and How Do You Diagnose It?
Varicose veins are commonly caused by prolonged sitting or standing or a sedentary lifestyle which results in poor circulation to the extremities. This causes blood to pool in the veins of the legs causing a constant low level of increased pressure that eventually weakens the veins. Chronic constipation which causes increased vascular pressure upon straining, can also be a contributing factor to varicose veins. In addition to localized pain and cosmetic concerns, there are primary risks associated with varicose veins. These include an increased risk of pulmonary embolism, thrombophlebitis, heart attack, and stroke due an increased potential for forming blood clots. The primary treatment principles are to strengthen vascular resistance, thin the blood, increase circulation, and treat constipation if present.

What are the possible treatments?

Botanical Therapies

**Bilberry Fruit Extract** (*Vaccinium myrtillus*): Rich in proanthocyanosides which strongly support the health of the vascular system and eyes. Bilberry elicits a powerful antioxidant effect which can potentially slow the progression of macular degeneration. Human clinical trials have reported on its ability to effectively treat diabetic and hypertensive retinopathy. Clinical studies have reported on its ability to support the integrity of the venous system, especially in reducing vascular permeability due to varicosities, as well as reduce a tendency to bruising.

**Dosage**: 2-4 ounces fresh berries (or common blueberries) daily; 160-320 mg of bilberry extract daily (yielding 25% proanthocyanosides).

**Butcher’s Broom** (*Ruscus aculeatus*): Contains a group of compounds known as ruscogenins that possess anti-inflammatory and vasoconstrictive activity through a direct effect on alpha-adrenergic receptors. Used both internally and externally to support vascular integrity. It is available in oral dosage forms and as ointments and suppositories.

**Dosage**: The equivalent to 7-11 mg of ruscogenins daily.

**Gotu Kola Herb** (*Centella asiatica*): Specific for strengthening vascular tissue through an increase in glycosaminoglycan synthesis and an increase in circulation to the extremities. Clinical studies have demonstrated efficacy in the treatment of varicose veins and venous insufficiency, healing of wounds and ulcers, scleroderma, and diseases of the connective tissue.

**Dosage**: 2-4 g daily (40% asiaticosides).

**Horse Chestnut Seed Extract** (*Aesculus hippocastanum*): Horsechestnut contains a steroid-like component called aescin that improves circulation, especially in the lower extremities. Used in the management of varicose veins and hemorrhoids. Rich in saponins which have a strengthening effect on the vascular system, decreases capillary permeability, reduces inflammation, inhibits enzyme that breaks down ground substance that supports vascular integrity, increases contractile potential of elastic fibers (venotonic).

**Dosage**: 500 mg three times daily (yielding 10 mg aescin three times daily). External preparations (1% aescin) are also available.

**Caution**: Do not apply to broken skin.

**Adjunctive Therapies**: Apply botanical compresses to varicosities by preparing a strong tea of white oak or witch hazel bark, soaking a cloth in the warm tea, and applying directly to the varicosities with the legs elevated; 1-2 times weekly. Whirlpool baths and other forms of hydrotherapy are beneficial for enhancing circulation in the extremities. Elevate the legs whenever possible to prevent the pooling of blood in the lower extremities. Morning and night, lay prostate on the back and pedal the legs as if riding a bicycle. Utilize compression stockings if necessary.

**Cautions**: Care should be taken if receiving a massage. Strenuous physical manipulation of varicosities can cause pain and increase the chance of dislodging a potentially life-threatening blood clot.

### NYBC Nutraceuticals for Varicose Veins:

<table>
<thead>
<tr>
<th>Nutraceutical</th>
<th>Dosage</th>
<th>Administration</th>
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<tbody>
<tr>
<td>Bilberry Extract 25% 80mg x 100</td>
<td>2-4/d (1B, 1L, 0-2D)</td>
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<tr>
<td>Butcher’s Broom 10% 250 mg x 90</td>
<td>3/d 1B, 1L, 1D</td>
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<tr>
<td>Horse Chestnut Seed Extract 250mg x 60</td>
<td>6/d (2B, 2L, 2D)</td>
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<tr>
<td>Horse Chestnut Pro x 60</td>
<td>2/d (1B, 1D)</td>
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