Chronic Leg Swelling | Chronic Venous Insufficiency

1. Horse Chestnut Seed Extract

Taking horse chestnut seed extract orally can reduce some symptoms of chronic venous insufficiency, such as varicose veins, pain, tiredness, tension, swelling in the legs, itching, and edema in patients with chronic venous insufficiency (CVI).

**ORAL DOSE:** For chronic venous insufficiency, horse chestnut seed extract 300 mg containing 50 mg aescin used twice daily for 6 to 12 weeks.

Orally, horse chestnut seed extract with the toxic constituent esculin removed, seems to be well-tolerated. Some people who take this extract can experience dizziness, nausea, headache, and pruritis/itching.

**Research:** In a number of clinical and laboratory studies, an effect was seen after use for 8-12 weeks. When administered appropriately, venotonic agents can show anti-edematous, anti-inflammatory, antioxidative, and proteolytic effects as well as reduce capillary leakage. Furthermore, they increase vein tone and lymph flow. Venotonic agents should be considered if compression therapy alone is insufficient, contraindicated, or intolerable.

When taken for short periods of time in recommended dosage and form, HCSE seems to offer a viable alternative for those seeking relief from the discomfort and disability of chronic venous insufficiency.

**Alternatives:** Pycnogenol | Option 2, next page

**Side Effects**
Standardized HCSE generally is considered to be safe in adults at recommended doses for short periods of time. Stomach upset, muscular (calf) spasm, headache, dizziness, nausea, and itching have been reported. Contact skin irritation (dermatitis) has been reported following application of HCSE to the skin. HCSE may cause an allergic reaction in patients with known allergy to horse chestnuts, esculin, or any of its ingredients (flavonoids, biosides, trisides of quertins, and oligosaccharides, including 1-ketose and 2-ketose). Anaphylactic shock has been reported with intravenous use.12

There is not enough scientific evidence to recommend use of horse chestnut in children. Deaths have been reported in children who ate raw horse chestnut seeds or tea made from horse chestnut leaves and twigs. Unprocessed horse chestnut seeds, flowers, branch bark, and leaves have not been shown effective for any indication. These contain esculin and have been associated with significant toxicity and death. Symptoms of HCSE poisoning may include vomiting, diarrhea, headache, confusion, weakness, muscle twitching, poor coordination, coma, or paralysis. HCSE standardized to escin content should not contain significant levels of esculin, and should not have the same risks.

HCSE may cause lowered blood sugar, so caution is advised in patients with diabetes or hypoglycemia, and in those taking drugs, herbs, or supplements that affect blood sugar. Serum glucose levels may need to be monitored by a qualified health care provider, and medication adjustments may be necessary.

In theory, HCSE may increase the risk of bleeding. Caution is advised in patients with bleeding disorders or taking drugs that may increase the risk of bleeding. Monitoring is recommended and dosing adjustments may be necessary. Liver and kidney toxicity has been associated with HCSE. Aflatoxins, considered to be cancer-causing agents, have been identified in commercial skin products containing horse chestnut, but not in HCSE.
2. PYCNOGENOL (pick-no-gen-ol)

Option 2: Taking pycnogenol orally seems to reduce edema, as well as symptoms of leg pain and heaviness, in people with chronic venous insufficiency (CVI) when used for 3-12 weeks. The dose of pycnogenol used most often is 100-120 mg three times daily. However, lower doses of 50 mg three times daily or 45-90 mg once daily also seem to be effective. Some people also use horse chestnut seed extract to treat chronic venous insufficiency, but pycnogenol alone appears to be more effective.

When used orally and appropriately, pycnogenol has been safely used in doses of 50-450 mg daily for up to one year. Do not use both horse chestnut seed and pycnogenol at the same time.

In chronic venous insufficiency (CVI, varicose veins), procyanidins in pycnogenol reduce capillary permeability, which contributes to edema and microbleeding, by cross-linking capillary wall proteins such as collagen and elastin. There is also some evidence that procyanidins make elastin more resistant to degradation by elastase, and that pycnogenol might inhibit elastase and collagenase released by activated macrophages. Pycnogenol might also help prevent capillary permeability due to the antioxidant effects of several of its constituents. Pycnogenol also seems to recycle ascorbyl and tocopheryl radicals, helping to maintain vitamin C and E levels. Benefits for other uses, including diabetic retinopathy and improving athletic performance, are also thought to be due to the antioxidant effects of pycnogenol.

(From Prescribersletter / http://naturaldatabase.therapeuticresearch.com)

Dosage/Administration:

ORAL:
For allergic rhinitis, 50 mg twice a day has been used.
For asthma in children, 1 mg/lb body given in two divided doses has been used.
For chronic venous insufficiency, 45-360 mg daily, or 50-100 mg three times daily have been used.
For cramps, 200 mg daily has been used.
For diabetic and other retinopathies, 50 mg three times daily has been used.
For diabetic microangiopathy, 50 mg three times daily has been used.
For coronary artery disease, 150 mg three times daily has been used.
For erectile dysfunction, 120 mg daily has been used.
For hypercholesterolemia, a dose of 120 mg three times daily has been used.
For mild hypertension, 200 mg of pycnogenol daily has been used.
For improving exercise capacity in athletes, 200 mg daily has been used.
For chronic pelvic pain, dysmenorrhea, and endometriosis in women, 30-120 mg daily has been used.
For menopausal symptoms, 100 mg twice daily has been used.