



Hygeia  
Journal for drugs and medicines  
April 2012-September2012  
OPEN ACCESS

[www.hygeiajournal.com](http://www.hygeiajournal.com)

A half yearly scientific, international, open access journal for drugs and medicines

## Phytotherapy of Chronic Venous Insufficiency

Dr.D.Sureshkumar

Head, R&D, CARE keralam Ltd, KINFRA Small Industries Park, Nalukettu Road, Kerala, India.680309.

Chronic venous insufficiency (CVI) is primarily a vascular disease characterized by insufficient blood flow, edema and heavy legs. It is a result of age, lifestyle and obesity. As functional valves are required to provide for efficient blood return from the lower extremities, CVI often occurs in veins of the legs. Itching is a common symptom, along with hyper pigmentation of legs. Symptoms also include phlebotic lymphoedema and chronic swelling of legs. There is also increased risk of ulcers and cellulites. The description of varicose veins as a clinical entity can be traced back as early as the fifth century B.C. The ancient physicians Hippocrates and Galen described the disease and treatment modalities, which are still used today. It was Hippocrates who recommended bandaging to treat it.

Physical training is considered the best therapy. However, many older patients are limited in this respect. Compression stockings and diuretics may provide some relief, but their effect is only symptomatic. Topically applied creams and ointments give short-term relief to itching of inflammation. There is no convincing orally administered synthetic drug that can cure CVI.

Nevertheless, many herbal medicines have the ability to cause considerable reduction in the severity of the disease. Extract of the seeds of the horse chestnut is used traditionally to treat CVI. Escin, the major component of the extract inhibits the catalytic breakdown of capillary wall proteoglycan. More than a dozen clinical trials show that the extract is effective in improving objective symptoms like pain and leg volume.

Japanese pagoda tree (*Styphnolobium japonicum*) contains high amount of the flavonoid rutin, which has significant antioxidant property. Oxerutin improves symptoms of CVI stages I and II. The therapeutic effect of oxerutin persists even after the cessation of the treatment. Rutin derivatives (fagorutin) isolated from buck wheat (*Fagopyrum esculentum*) are also good alternatives.

Extract of red wine leaf (*Vitis vinifera folium*) is rich in flavonoides, offering therapeutic benefit to patients of CVI. The extract administered once daily in 360 mg or 720 mg doses significantly reduces edema and circumference of the lower leg.

Extract of the french maritime pine bark (*Pinus maritima*) is shown to be effective in improving resting flux, rate of ankle swelling and edema .

Ayurveda does not describe CVI as a distinct disease entity and experienced traditional physicians consider it as *vatarakta*, and variants of ulcers. Nevertheless, modern researches have shown that the ayurvedic herb *Centella asiatica* has remarkable ability to cure CVI. The total triterpene fraction of *C.asiatica* has been found to be effective in CVI and varicosities by improving microcirculation and metabolic activity of the vascular and perivascular connective tissue.

In addition to its varied beneficial biochemical effects, the fraction positively influences lymphatic function in patients with lymphatic and post-phlebotic oedema. Many clinical studies carried out with the extract report that it is a venoactive substance which may act on different phases of CVI and slow down the development of the degenerative process of the venous system associated with CVI.



*Dr.D.Sureshkumar MSc, PhD*  
*Head, R&D, CARE keralam Ltd, KINFRA*  
*Small Industries Park, Nalukettu Road,*  
*Kerala, India.680309.*  
[www.carekeralam.com](http://www.carekeralam.com) 0091-94-493-48897,  
[dvenu21@yahoo.com](mailto:dvenu21@yahoo.com)