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## Horse-chestnut seed

*Aesculus hippocastanum* L., semen

This is a summary of the scientific conclusions reached by the Committee on Herbal Medicinal Products (HMPC) on the medicinal uses of horse-chestnut seed. The HMPC conclusions are taken into account by EU Member States when evaluating applications for the licensing of herbal medicines containing horse-chestnut seed.

This summary is not intended to provide practical advice on how to use medicines containing horse-chestnut seed. For practical information about using horse-chestnut seed medicines, patients should read the package leaflet that comes with the medicine or contact their doctor or pharmacist.

### What is horse-chestnut seed?

Horse-chestnut seed is the common name for the seeds of the plant *Aesculus hippocastanum* L.

The HMPC conclusions only cover horse-chestnut seed preparations that are obtained by putting the seeds in a solvent (such as ethanol, methanol or water) to dissolve compounds and form a liquid extract. Dry extracts are also obtained by partially evaporating the solvent.

Herbal medicines containing these horse-chestnut seed preparations are usually available in solid and liquid forms to be taken by mouth. Semi-solid forms to be applied to the skin are also available.

Horse-chestnut seed preparations may also be found in combination with other herbal substances in some herbal medicines. These combinations are not covered in this summary.

### What are the HMPC conclusions on its medicinal uses?

The HMPC concluded that these horse-chestnut seed preparations can be taken by mouth to treat chronic (long-term) venous insufficiency, which is characterised by swollen legs, varicose veins, a feeling of heaviness in the legs, pain, tiredness, itching, tension and cramps in the calves.

The HMPC also concluded that, on the basis of their long-standing use, these horse-chestnut seed preparations can be taken by mouth or applied to the skin to relieve discomfort and heaviness of legs related to minor circulation problems in the veins as well as for relief of signs of bruises, such as local swelling and haematoma (a collection of blood under the skin).



Horse-chestnut seed medicines should only be used in adults. They may also be applied to the skin in adolescents for the treatment of bruises. If symptoms get worse during treatment, a doctor should be consulted. For chronic venous insufficiency, treatment may be needed for at least 4 weeks before symptoms improve. For minor circulatory problems, if symptoms of discomfort and heaviness of legs do not improve after 2 weeks, a doctor or a qualified healthcare practitioner should be consulted. For the treatment of bruises, a doctor or a qualified healthcare practitioner should be consulted if symptoms persist for longer than 5 days. Detailed instructions on how to take horse-chestnut seed medicines and who can use them can be found in the package leaflet that comes with the medicine.

### **How does horse-chestnut seed work as a medicine?**

The way horse-chestnut seed medicines work is not fully known, but studies indicate that can change venous tone (pressure in the veins) and capillary filtration (fluid passing out of the capillaries into surrounding tissue).

### **What evidence supports the use of horse-chestnut seed medicines?**

The HMPC conclusions on the use of these horse-chestnut medicines for chronic venous insufficiency are based on their 'well-established use' in this condition. This means that there are bibliographic data providing scientific evidence of their effectiveness and safety when used in this way, covering a period of at least 10 years in the EU.

In its assessment, the HMPC considered a number of clinical studies including two meta-analyses with horse-chestnut seed medicines in patients with chronic venous insufficiency. Some of the studies had positive results, showing improvements in symptoms, including reduction in swelling, leg volume, pain and itching.

In one of the studies a horse-chestnut seed medicine was compared both with placebo and with compression stockings and led to a significant reduction of leg volume after 12 weeks of treatment (around 25%). This was comparable to the effect of compression stockings.

The HMPC conclusions on the use of these horse-chestnut medicines for minor circulation problems are based on their 'traditional use' in this condition. This means that, although there is insufficient evidence from clinical trials, the effectiveness of these herbal medicines is plausible and there is evidence that they have been used safely in this way for at least 30 years (including at least 15 years within the EU). Moreover, the intended use does not require medical supervision.

For detailed information on the studies assessed by the HMPC, see the HMPC assessment report.

### **What are the risks associated with horse-chestnut seed medicines?**

The most common side effects with horse-chestnut seed medicines taken by mouth are gastrointestinal disorders (side effects affecting the gut), headache, dizziness, itching and allergic reactions. When applied to the skin, hypersensitivity (allergic) skin reactions have been reported.

Further information on the risks associated with these horse-chestnut seed medicines, including the appropriate precautions for their safe use, can be found in the monograph which is published on the Agency's website under the section

'Documents': <https://www.ema.europa.eu/en/medicines/herbal/hippocastani-semen>.

## **How are horse-chestnut seed medicines approved in the EU?**

Any applications for the licensing of medicines containing horse-chestnut seed have to be submitted to the national authorities responsible for medicinal products, which will assess the application for the herbal medicine and take into account the scientific conclusions of the HMPC.

Information on the use and licensing of horse-chestnut seed medicines in EU Member States should be obtained from the relevant national authorities.

## **Other information about horse-chestnut seed medicines**

Further information on the HMPC assessment of horse-chestnut seed medicines, including details of the Committee's conclusions, can be found in the section 'Documents' on the Agency's website: <https://www.ema.europa.eu/en/medicines/herbal/hippocastani-semen>. For more information about treatment with horse-chestnut seed medicines, read the package leaflet that comes with the medicine or contact your doctor or pharmacist.