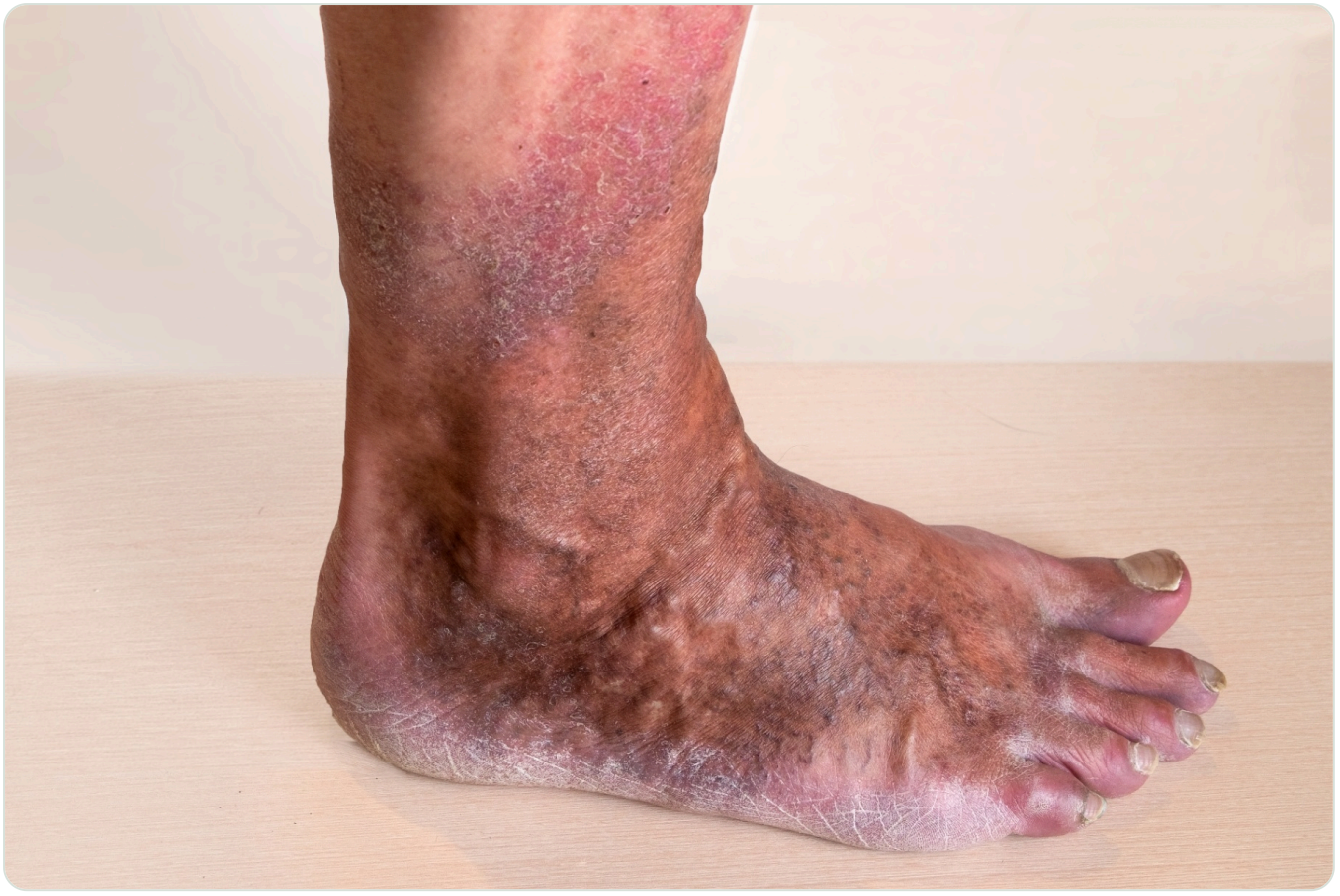
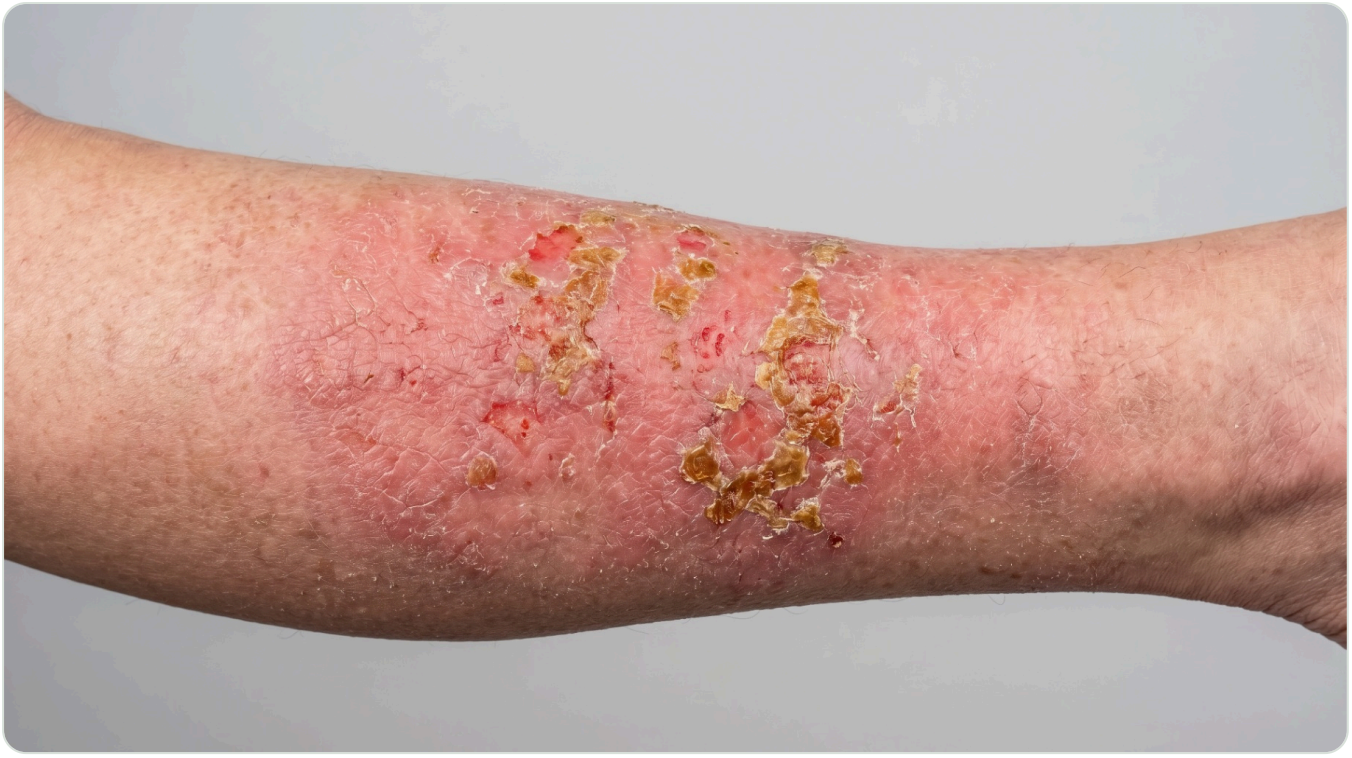
Venous eczema and brown spots on the legs: An early warning sign of varicose veins



Brown spots, itching and dry, scaly skin on the lower leg are classic signs of **venous eczema (stasis dermatitis)** - a skin reaction to long-standing venous hypertension. The condition affects **up to 20% of patients with chronic venous insufficiency** [1] and is an important warning sign: without treatment, about **1 in 3** patients will develop a **venous ulcer** within 5 years [2].

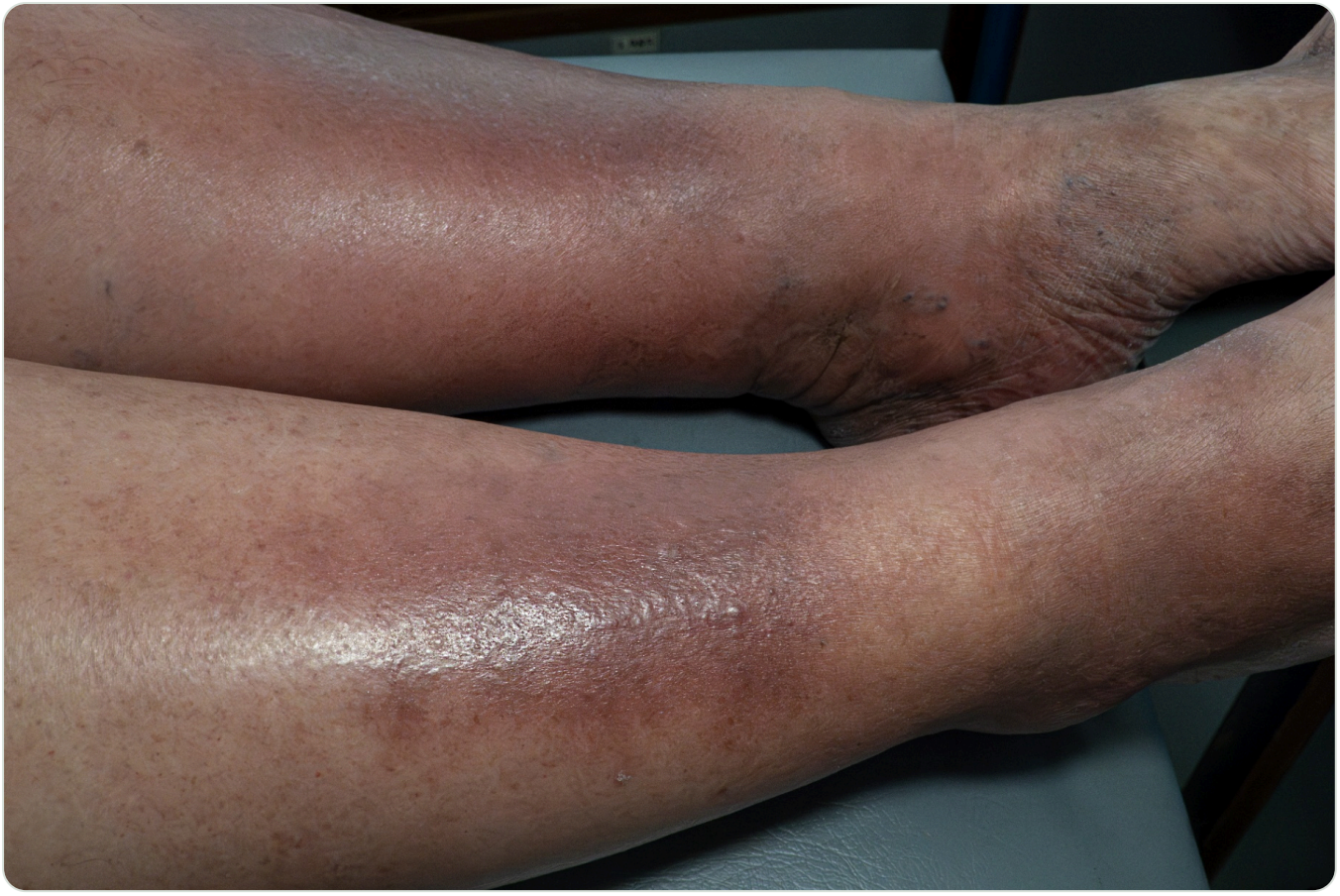
How does venous eczema develop?



When the venous valves fail, blood flows backwards (reflux) and creates elevated pressure in the veins of the lower leg. This causes:

1. **Leakage of red blood cells** through the capillary wall
2. **Haemosiderin deposits** - the iron in haemoglobin permanently colours the skin brownish
3. **Chronic inflammation** in the subcutaneous tissue
4. **Oxygen deficiency** in the skin → dry, itchy, scaly surface
5. **Fibrosis** (lipodermatosclerosis) → firm, constricted skin around the ankle ("inverted champagne bottle")

Symptoms you should know



Sign	What it means
Brown spots on the inside of the ankle	Haemosiderin - chronic venous hypertension
Itching and dry skin on the lower leg	Active venous eczema (C4a)
Scaly or weeping skin	Inflammatory phase
Hard, constricted skin at the ankle	Lipodermatosclerosis (C4b) - ulcer risk
White scarred areas	Atrophie blanche - very high ulcer risk
Swelling at the end of the day	Associated swollen legs

How to distinguish venous eczema from other skin disease

Diagnosis	Location	Characteristics
Venous eczema	Inside of ankle/calf	Brown pigmentation, concurrent varices/oedema
Contact eczema	Wherever the allergen touches	Acute, itchy, possibly blisters
Atopic eczema	Elbow folds, knees, neck	Personal/family atopy
Cellulitis	Acute, unilateral	Fever, warmth, intense redness
Arterial ischaemia	Toes, dorsum of foot	Pain, cool skin, weak pulses

Confusion with cellulitis is common - venous eczema is not treated with antibiotics [3].

When to see a doctor?

Contact your GP or a specialist surgeon if you have:

- Brown spots or discolouration on the lower leg
- Itchy, scaly skin for several weeks
- Visible varicose veins + skin changes
- Hard, firm skin around the ankle
- Previous venous ulcer
- Associated heavy, tired legs or spider veins

Work-up

1. **Clinical assessment** and CEAP classification (C4a/C4b).
2. **Doppler ultrasound (duplex scan)** - maps valve failure and reflux [4].
3. **Ankle-brachial index (ABI)** before compression therapy.

4. **Patch test** if secondary contact allergy to creams or dressings is suspected.

Treatment

1. Treating the underlying cause - the only thing that stops progression:

- **Endovenous laser ablation (EVLA/EVLT)** of incompetent trunk veins is first-line.
- The treatment significantly reduces eczema, swelling and recurrent ulcers [5].

2. Compression - the cornerstone of symptom control:

- Class II compression stockings (23-32 mmHg) daily
- Requires normal ABI

3. Topical treatment of acute eczema:

- **Moisturiser** several times daily (unscented)
- **Short-term** medium-strength steroid cream (1-2 weeks) for active inflammation [6]
- **Stop using wet wipes and soap** on the legs - use a gentle emollient
- Avoid lanolin and perfumed products (common contact allergens)

4. Lifestyle:

- Daily exercise → activates the calf muscle pump
- Elevate the legs 15-20 min several times daily
- Weight loss if BMI >25
- Avoid long periods of standing or sitting

Treatment at Kirurgen.dk

We offer Doppler ultrasound and **endovenous laser ablation (EVLA/EVLT)** under the public health insurance scheme. Early treatment prevents progression to a venous ulcer. See also our articles on treatment of varicose veins, spider veins and swollen legs and ankles.

References

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3. Weaver J, Billings SD. *Initial presentation of stasis dermatitis mimicking solitary lesions.* J Am Acad Dermatol 2009;61(6):1028-32.
4. Gloviczki P, et al. *The 2022 SVS/AVF/AVLS clinical practice guidelines for the management of varicose veins.* J Vasc Surg Venous Lymphat Disord 2023;11(2):231-61.
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