

Symptoms of a Blood Clot in the Leg (DVT): When Should You Seek Urgent Medical Attention?



A blood clot in the leg - medically known as **deep vein thrombosis (DVT)** - is a serious condition where a blood clot forms in the deep veins, most often in the calf or thigh. The condition affects approximately 1 in 1,000 adults annually in Denmark and is dangerous because the clot can break loose and travel to the lungs (**pulmonary embolism**) [1]. Early recognition saves lives.

The Classic Symptoms

Classic DVT presents with:

- **Swelling of one leg** (rarely both) - often the entire calf or the whole leg
- **Pain or tenderness** in the calf, especially with movement and on touch
- **Warmth and redness** in the swollen area

- **Taut, shiny skin** and visible superficial veins
- A feeling of "heaviness" and **cramps**
- Often, the symptoms begin **gradually over hours to days** - not suddenly like a muscle injury

Up to **50% of DVT cases occur without classic symptoms** and are only discovered when a pulmonary embolism develops [2]. Therefore, clinical suspicion is crucial.

Pulmonary Embolism - Call 112

If the blood clot breaks loose and travels to the lungs, a **pulmonary embolism** occurs, with symptoms including:

- **Sudden shortness of breath**, often without exertion
- **Chest pain**, often worse on deep inspiration
- **Cough**, possibly with bloody sputum
- **Rapid pulse** (> 100 beats per minute)
- Fainting or a sudden drop in blood pressure
- Anxiety and a feeling that "something is wrong"

If you experience these symptoms - call 112 immediately. A pulmonary embolism is a life-threatening medical emergency.

Wells Score: Risk Assessment

Doctors often use the **Wells score for DVT** to assess the probability [3]:

Criterion	Points
Active cancer	1
Paralysis or leg in a plaster cast	1
Immobilisation > 3 days / surgery < 4 weeks ago	1

Criterion	Points
Localised tenderness along the deep venous system	1
Swelling of the entire leg	1
Calf swelling > 3 cm larger than the other leg	1
Pitting oedema (only) on the affected leg	1
Previous DVT	1
Visible superficial veins (non-varicose)	1
An alternative diagnosis is at least as likely	-2

≥ 2 points = DVT likely → urgent **D-dimer test + ultrasound scan**. **< 2 points** = DVT unlikely → D-dimer test as the first step.

Risk Factors

- **Immobilisation:** long-haul flights, bed rest, plaster casts
- **Recent surgery** (especially hip/knee, abdominal)
- **Cancer** and cancer treatment
- **Pregnancy and the postpartum period** (5-6 × increased risk)
- **Contraceptive pills, hormone therapy**
- **Previous DVT**
- Hereditary thrombophilia (Factor V Leiden, protein C/S deficiency)
- **Obesity** and smoking
- **Varicose veins and venous insufficiency** increase the risk, particularly for superficial thrombophlebitis, which develops into DVT in 6-25% of cases [4]

Conditions Mistaken for DVT

DVT is often mistaken for:

- **Muscle injury:** occurs suddenly during activity, often with a "popping" or "snapping" sensation
- **Calf cramps:** short-lived, resolve on their own - see [cramps in the calf](#)
- **Ruptured Baker's cyst:** sudden calf pain, often in someone with a known knee problem
- **Cellulitis/erysipelas:** redness and fever, but more often well-demarcated
- **[Chronic venous insufficiency](#):** gradual swelling, usually affecting both legs

If in doubt: **see a doctor the same day** - DVT is a diagnosis of exclusion that requires a D-dimer test and an ultrasound scan.

Treatment

DVT is treated with **anticoagulation** (blood-thinning medication) for at least 3 months [5]:

- **DOACs** (apixaban, rivaroxaban) are the first-choice treatment for most people
- LMWH (low-molecular-weight heparin) for 5 days plus warfarin is an alternative
- LMWH alone is used for patients with cancer, during pregnancy, or with severe kidney failure

The duration of treatment depends on the cause, risk of recurrence, and bleeding risk. For a provoked DVT (e.g., after surgery), treatment is often for 3 months; for an unprovoked or cancer-associated DVT, it is longer - often lifelong.

Post-Thrombotic Syndrome - The Long-Term Complication

Up to **20-50% of DVT patients** develop post-thrombotic syndrome: chronic swelling, heaviness, pain, and skin changes in the affected leg [6]. This is effectively a **secondary chronic venous insufficiency** with the same spectrum of complications as primary [varicose veins](#).

Wearing a Class 2 compression stocking for at least 2 years after a DVT significantly reduces the risk.

Symptom	Action
One-sided swelling + calf pain	Contact a doctor urgently the same day
Pain + shortness of breath + chest pain	Call 112
Both legs swollen, improves overnight	Get assessed for <u>venous insufficiency</u>
Tender, red, hard vein	Suspected <u>thrombophlebitis</u>

If you have had a DVT, you should be assessed for chronic venous disease by a specialist consultant in vascular surgery.

References

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3. Wells PS, et al. *Evaluation of D-dimer in the diagnosis of suspected deep-vein thrombosis*. N Engl J Med 2003;349(13):1227-35.
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5. Stevens SM, et al. *Antithrombotic therapy for VTE disease: CHEST guideline 2021*. Chest 2021;160(6):e545-e608.
6. Kahn SR, et al. *The post-thrombotic syndrome: evidence-based prevention, diagnosis and treatment strategies*. Lancet 2014;383(9920):880-8.