

# Leg swelling history

بِسْمِ اللّٰهِ

اللّٰهُمَّ اجْعَلْ هَذَا الْعَمَلَ خَالِصاً لَوَجْهِكَ نَافِعاً لَأَمْتِكَ مُوَصَّلاً إِلَيْكَ لِصَارِفاً عَنْكَ آمِينَ

## First :

Introduce yourself to the patient including your name and role.

Confirm the patient's name and date of birth.

Explain that you'd like to take a history from the patient.

Gain consent to proceed with history taking.

## Presenting complaint :

Use open questioning to explore the patient's presenting complaint:

- "What's brought you in to see me today?"
- "Tell me about the issues you've been experiencing."

Provide the patient with enough time to answer and avoid interrupting them.

Facilitate the patient to expand on their presenting complaint if required:

- "Ok, can you tell me more about the leg swelling?"

لأستسعملك الصعب أو أبلغ أمتي فما انقادت الآمال  
إلا لصابر!



HISTORY TAKING  
INTERNAL MEDICINE



## Socrates :

The SOCRATES acronym is a useful tool for exploring each of the patient's presenting symptoms in more detail. It is most commonly used to explore pain but can be applied to other symptoms, although some of the elements of SOCRATES may not be relevant to all symptoms.

### Site

Ask if the leg swelling is unilateral (if so, which leg) or bilateral:

- "Are both legs swollen, or just one leg?"

In bilateral swelling, the legs may be swollen to different degrees.

### Onset

Clarify how and when the swelling developed:

- "When did the leg swelling start?"
- "Did it start suddenly or develop slowly?"

The onset of leg swelling may suggest different underlying causes:

- Onset over minutes to hours is seen with inflammatory reactions and trauma
- Onset over hours to a few days is suggestive of DVT/STP, cellulitis or rupture of a Baker's cyst
- Onset over weeks to months indicates more chronic pathology, such as hypoalbuminaemia, [heart failure](#) or cor pulmonale, chronic venous insufficiency, lymphatic dysfunction, or a pelvic mass.

### Character

Ask about the specific characteristics of the leg swelling:

- Is the swelling pitting (a dimple remains after the skin is pressed with a finger) or non-pitting?

Chronic venous insufficiency and chronic lymphoedema cause fibrosis and non-pitting oedema, while other causes are associated with pitting oedema.





## Radiation

Ask about the progression of the leg swelling:

- "Where in the leg did the swelling first start?"
- "Did the leg swelling start in a specific place?"
- "Has the swelling moved anywhere else?"

Swelling starting at the knee and moving distally into the calf and foot suggests a ruptured Baker's cyst. Other knee pathology, such as arthritis of any type, gout or pseudogout can also cause swelling which moves down into the lower leg due to gravity.

Swelling starting in the foot or lower leg and moving proximally (possibly as high as the thigh) is seen with DVT, lymphatic dysfunction, pelvic mass, heart failure/cor pulmonale, chronic venous insufficiency hypoalbuminaemia, oedema secondary to immobility and medication side effects. Pathology in the joints of the foot or ankle (e.g. arthritis, gout, ruptured Achilles tendon) can also cause swelling that moves up into the leg.

Swelling which starts in a localised area and spreads outwards is seen in cellulitis, STP, trauma and inflammatory reactions.

## Associated symptoms

Ask if there are other symptoms which are associated with the leg swelling:

- "Are there any other symptoms associated with the leg swelling?"

Specifically, ask about pain in the leg:

- **Acute pain** suggests cellulitis, DVT/STP, a ruptured Baker's cyst, or an inflammatory reaction
- **Chronic, aching pain and heaviness** occur in chronic venous insufficiency
- Other causes of leg swelling are **painless**

**Other important associated symptoms to ask about include:**

- **Erythema** is seen in cellulitis, DVT/STP, ruptured Baker's cyst and inflammatory reactions
- **Itching** suggests a reaction to a bite or sting
- **Fever** suggests cellulitis (**septic arthritis** should also be considered if the swelling originated around a joint)
- **Weight loss**, back pain and urinary urgency may suggest a pelvic malignancy; in women, there may be abnormal vaginal bleeding or discharge





- **Shortness of breath**, particularly when lying flat, is seen in **heart failure** and cor pulmonale
- Patients may report **frothy urine** in **nephrotic syndrome** due to proteinuria, and more generalised oedema
- In liver cirrhosis, other symptoms may include **jaundice, ascites and easy bruising**

## Time course

Clarify how the leg swelling changes over time:

- "Is the swelling there all the time, or does it come and go?"

## Exacerbating or relieving factors

Ask if anything makes the leg swelling worse or better:

- "Does anything make the leg swelling worse?"
- "Does anything make the leg swelling better?"

Swelling which improves with elevation of the legs (e.g. whilst the patient is in bed overnight) suggests the primary problem is excess interstitial fluid. If the swelling is constant, this indicates a problem with lymphatic drainage.

Ask whether the swelling has coincided with the initiation of new medications.

## Severity

N/A

**Wells score for DVT**

When a DVT is suspected, the **two-level DVT Wells score** is used to assess the condition's **pre-test probability** and guide further investigations. The score should not be used for pregnant women or those in the first six weeks postpartum, as these patients should all be referred for same-day assessment.

Clinical feature	Points
Active cancer (currently receiving treatment or treatment within 6 months or palliative)	1
Paralysis, paresis or recent plaster immobilisation	1
Recently bedridden ( <b>3 days or more</b> ), or major surgery within the last <b>3 months</b>	1
Localised tenderness along the distribution of the deep venous system	1
Entire leg swollen	1
Calf swelling at least <b>3cm larger</b> than the asymptomatic side	1
Pitting oedema in the symptomatic leg	1
Collateral superficial veins (non-varicose)	1
Previously documented DVT	1
An alternative diagnosis is at least as likely as DVT	-2

\* If both legs are symptomatic, the more symptomatic leg should be used

Remember the **rule of 3s**:

- Bedridden for **3 days**
- Surgery in the last **3 months**
- Leg **3cm larger**

A DVT is considered **likely** if the score is two points or more and **unlikely** if the score is one point or fewer.





## Systemic enquiry :

A systemic enquiry involves performing a brief screen for symptoms in other body systems which may or may not be relevant to the primary presenting complaint. A systemic enquiry may also identify symptoms that the patient has forgotten to mention in the presenting complaint.

Deciding on which symptoms to ask about depends on the presenting complaint and your level of experience.

Some examples of symptoms you could screen for in each system include:

- **Systemic:** fever, unintentional weight loss
- **Cardiovascular:** chest pain, palpitations
- **Respiratory:** shortness of breath, orthopnoea, paroxysmal nocturnal dyspnoea
- **Gastrointestinal:** features of liver disease (e.g. jaundice, abnormal bruising, abdominal distension) or pelvic malignancy (abdominal bloating, pain, change in bowel habit)
- **Genitourinary:** frothy urine (nephrotic syndrome), urinary urgency and/or frequency (pelvic mass); in women, ask about abnormal vaginal bleeding or discharge
- **Musculoskeletal:** chest wall pain, trauma
- **Dermatological:** rashes, ulcers

## Past medical history :

Ask if the patient has any medical conditions:

- “Do you have any medical conditions?”
- “Are you currently seeing a doctor or specialist regularly?”

Ask if the patient has previously undergone any surgery (e.g. lower limb surgery, pelvic surgery, cancer surgery):

- “Have you ever previously undergone any operations or procedures?”
- “When was the operation/procedure, and why was it performed?”

If the patient does have a medical condition, you should gather more details to assess how well controlled the disease is and what treatment(s) the patient is receiving. It is also important to ask about any complications associated with the condition including hospital admissions.





## Allergies

Ask if the patient has any allergies and if so, clarify what kind of reaction they had to the substance (e.g. mild rash vs anaphylaxis).

### Examples of relevant medical conditions

Relevant medical conditions in the context of leg swelling include:

- History of DVT/PE: may increase the risk of further thrombotic events; past DVT is also a cause of chronic venous insufficiency
- Cardiovascular disease, such as myocardial infarction (increases the risk of heart failure)
- Chronic respiratory conditions, such as [COPD](#) (increases risk of cor pulmonale)
- Peripheral vascular disease or [varicose veins](#)
- Malignancy, including surgery for any previous malignancy.
- Conditions which increase the risk of infection (e.g. diabetes mellitus)
- Musculoskeletal conditions, such as arthritis, gout and pseudogout
- Liver disease
- Renal disease
- Eating disorders (risk of malnutrition)

## Drug history:

Ask if the patient is currently taking any prescribed medications or over-the-counter remedies:

- “Are you currently taking any prescribed medications or over-the-counter treatments?”

If the patient is taking prescribed or over the counter

medications, document the medication name, dose, frequency, form and route.

Ask the patient if they’re currently experiencing any side effects from their medication:

- “Have you noticed any side effects from the medication you currently take?”
- “Do you think your leg swelling started after you began taking any of your current medications?”
- “Have you noticed any side effects from the medication you currently take?”





#### Medication examples

Medications which **increase the risk of DVT** include:

- [Combined oral contraceptive pill](#) (e.g. Microgynon)
- Hormone replacement therapy (HRT)
- Norethisterone
- Tranexamic acid

**Amlodipine**, prescribed for [hypertension](#), commonly causes oedema of the lower limbs.

**NSAIDs** (e.g. ibuprofen and naproxen) cause salt and fluid retention, leading to peripheral oedema

**Quinolone antibiotics** (e.g. ciprofloxacin) increase the risk of tendon rupture.

Medications which increase the risk of infection include **corticosteroids** (e.g. prednisolone) and disease-modifying anti-rheumatic drugs (e.g. [methotrexate](#)).

Medications which patients may already be taking for leg swelling include:

- Anticoagulants for previous thromboembolic events (e.g. rivaroxaban, apixaban or [warfarin](#))
- Loop diuretics for oedema (e.g. furosemide, bumetanide)

## Family history :

Ask the patient if there is any family history of lymphoedema, malignancy, venous thromboembolism (DVT/PE) or cardiovascular disease.

- “Do any of your parents or siblings have any medical conditions?”

Clarify at what age the disease developed (disease developing at a younger age is more likely to be associated with genetic factors).

If one of the patient’s close relatives are deceased, sensitively determine the age at which they died and the cause of death:

- “I’m really sorry to hear that, do you mind me asking how old your dad was when he died?”
- “Do you remember what medical condition was felt to have caused his death?”





## Social history:

### General social context

Explore the patient's general social context including:

- the type of accommodation they currently reside in (e.g. house, bungalow) and if there are any adaptations to assist them (e.g. stairlift)
- who else the patient lives with and their personal support network
- what tasks they are able to carry out independently and what they require assistance with (e.g. self-hygiene, housework, food shopping)
- if they have any carer input (e.g. twice daily carer visits)

### Smoking

Record the patient's smoking history, including the type and amount of tobacco used.

Calculate the number of 'pack-years' the patient has smoked for to determine their cardiovascular risk profile:

- pack-years = [number of years smoked] x [average number of packs smoked per day]
- one pack is equal to 20 cigarettes

See our [smoking cessation guide](#) for more details.

Smoking increases the risk of DVT, cardiovascular disease and chronic venous insufficiency.

### Alcohol

Record the frequency, type and volume of alcohol consumed on a weekly basis.

See our [alcohol history taking guide](#) for more information.

Excess alcohol consumption increases the risk of liver cirrhosis.





### Recreational drug use

Ask the patient if they use recreational drugs and if so, determine the type of drugs used and their frequency of use. Intravenous drug use is a risk factor for DVT.

### Fluid intake

Patients with poor fluid intake are at increased risk of DVT due to dehydration.

### Occupation

Ask about the patient's current occupation and how their symptoms impact their ability to perform their role.

## At the end of history :

Summarise the key points back to the patient. Ask the patient if they have any questions or concerns that have not been addressed.

Thank the patient for their time.

