

Clinical Practice Summary

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Chronic Venous Ulcers (CVUs) are a type of chronic skin ulcer caused by **venous insufficiency**, lasting more than 6 weeks, and commonly located near the **medial malleolus**.

The pathophysiology involves **venous hypertension** due to valve incompetence or obstruction, leading to **venous stasis** and fibrin cuff formation, which causes **inflammation** and **tissue hypoxia**, resulting in ulceration.

Risk factors include **chronic venous insufficiency**, **deep vein thrombosis**, **varicose veins**, **obesity**, and **prolonged standing**.

The ulcers present as **irregular, shallow wounds** with yellow slough and granulation, accompanied by **hemosiderin deposition** and **lipodermatosclerosis**.

Pain is typically **mild to moderate** and worsens with standing but improves with leg elevation. Diagnosis includes **clinical examination**, the **Ankle-Brachial Index**, and **duplex ultrasound**.

Management involves **conservative treatments** like **compression therapy**, **wound care**, and **skin care**, while **medical treatments** include **pentoxifylline** and **antibiotics** for infections.

Surgical options like endovenous ablation or **skin grafting** may be considered for advanced cases.

The **prognosis** suggests that healing may take 3–6 months, with a 70% recurrence rate in 5 years without proper compression therapy. Preventive measures include **compression stockings** and **regular exercise**.

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Chronic Obstructive Pulmonary Disease (COPD)

is a **progressive inflammatory lung condition** primarily caused by long-term exposure to **harmful substances** like cigarette smoke.

It includes two main conditions: **chronic bronchitis** (characterized by **inflammation** and **excessive mucus**) and **emphysema** (where the **alveoli** are destroyed).

Symptoms such as **persistent cough**, **shortness of breath**, and **wheezing** are common, and risk factors include **smoking**, **secondhand smoke**, **pollution**, and **genetic predispositions**.

Diagnosis is made using **spirometry**, **imaging tests**, and **blood tests**.

Management includes **lifestyle changes** like quitting smoking, **medications** such as **bronchodilators** and **corticosteroids**, and **surgical options** like **lung volume reduction surgery**.

Vaccines for **flu** and **pneumonia** are also recommended.

Although COPD is **incurable**, **early diagnosis** and treatment can **improve quality of life** and slow its progression.

Inguinal hernia involves the protrusion of abdominal contents near the **inguinal canal**, more common in **males**.

It may be **indirect** (congenital, via the deep ring) or **direct** (acquired, through Hesselbach's triangle).

Risk factors include congenital weakness, **heavy lifting**, **chronic cough**, and **obesity**.

Symptoms range from a **groin bulge** and **discomfort** to activity-related swelling. Major concerns are **incarceration** (non-reducible hernia) and **strangulation** (compromised blood supply), requiring urgent surgery.

Diagnosis is largely **clinical**, with imaging if needed.

Management options include **observation** for mild cases and **surgical repair**—either **open** or **laparoscopic**—especially for symptomatic or complicated hernias.

Lipomas are common **benign tumors** composed of fatty tissue, often found on the **upper arms**, **thighs**, or **torso**.

They are typically **soft**, **slow-growing**, and **painless**.

Though the exact cause is unclear, contributing factors include **genetics**, **age**, **trauma**, and syndromes like **Gardner syndrome**.

Diagnosis is primarily **clinical**, with imaging or biopsy used to rule out malignancy.

Treatment may not be needed unless the lipoma causes **discomfort**, grows, or poses **cosmetic concerns**.

Options include **surgical excision**, **liposuction**, or **steroid injections**.

Seek medical care if the lipoma becomes **painful**, enlarges quickly, or shows signs of **infection**.

Bicuspid aortic valve stenosis is a congenital heart condition where the aortic valve has **two cusps instead of three**, leading to early and progressive **valve narrowing**. It often presents in **younger adults** with symptoms like **chest pain**, **dyspnea**, **syncope**, or may be asymptomatic until severe. The abnormal valve structure accelerates **calcification** and worsens with age.

Diagnosis is confirmed with **echocardiography**, assessing valve anatomy and stenosis severity. Management includes **regular monitoring**, and in advanced cases, **surgical valve replacement** or **transcatheter aortic valve implantation (TAVI)** is indicated.