Box 1.2: Points to be noted in past history.

- Major illness.
- Diabetes, hypertension and tuberculosis.
- History of allergy.
- History of previous surgery – Related or not related.
- Last menstrual period in women of reproductive age.

Personal History

This should include details regarding **bladder and bowel** habits. **Recent loss** of **appetite and weight** are **significant.** The patient should be asked about **smoking, consumption of alcohol and chewing of tobacco**. All these three **habits are very common** in **most parts of our country**. **Questions** regarding **exposure to sexually transmitted diseases** and **HIV** quite **often elicit a negative answer** which may **not always be reliable**.

Box 1.3: Points to be noted in personal history.

- Bowel and bladder habits.
- Loss of appetite and weight.
- Habits – Chewing pan, smoking and consumption of alcohol.
- Drug addiction.
- Exposure to STD – HIV (often not reliable).

Treatment History

Most patients coming to **a tertiary** or a **teaching hospital** would have had **some treatment earlier**. **Unless inquired into**, the **relevant information may not be forthcoming**. **Unfortunately,** this **aspect** of the **history** is **underestimated,** with dire **consequences** in **some patients.**

Obstetric and Menstrual History

This should be asked for and recorded in female patients making the process of history taking complete. Thanks to the **time taken for this part,** the **confidence level** of the **patient** reaches a **high grade** and this makes **physical examination much easier**. One of the **primary reasons** for the **rapid increase** in **medical litigation** is the poor quality of history taking and physical examination, owing to **reduction in the time taken for eliciting** the **history** and completing the **physical examination.**

PHYSICAL EXAMINATION

Physical examination can be divided into **general, local, regional and systemic examinations.** This will **ensure** that **a comprehensive physical examination** is conducted in **every patient**.

General Physical Examination

The **first question** to ask oneself is does the patient appear to be in **distress?** If the answer is **positive,** the **rest** of the **examination** is to **be performed** in a **gentle** manner.

The **general part of the examination** consists of a brief **complete survey** of the patient. The focus is on the **build and nutrition**. On the **surgical side**

the **use** of a **rolled X-ray film** in the form of a **tube.** The light from a **pen torch** is **shone** on the swelling at one end and at a **point exactly** opposite, the transmitted light is **sought for** with this **tube**. If the fluid is clear, a pink glow is seen indicating **positive transillumination**.

10. Mobility: Mobility is basically classified as follows.

(*a*) **Intrinsic mobility: Upward movement** of a goiter with deglutition and **downward movement** of the liver with respiration **are two examples** for intrinsic mobility.

(*b*) **Extrinsic mobility:** The clinician tries to move the swelling in relation to the neighbouring structures. This examination is done in both horizontal and vertical directions. Mobility is **closely related** to the **anatomical plane** of the **swelling**. The terms used are free **mobility** (**fibroadenoma of the breast**), restricted **mobility** (**chronic inflammatory** swellings due to **fibrosis**) or fixed to the **deeper structures** (**advanced malignancy**).

(*c*) **Tree top mobility:** It is a **modification** of **restricted mobility.** When a **swelling** is large, the base may not move, but the top may **show** some movement. This is **best demonstrated** with **large and bulky pancreatic tumours**. Pancreas, being a **retroperitoneal organ,** is fixed in the clinical sense. But **being** a **bulky tumour**, a small part may come **in contact** with the **left dome** of the diaphragm. Thus the **swelling shows** some movement with respiration. This is **manifest** when the **patient** is in the supine **position.** But when the **patient is shifted** to the right lateral **position,** this **movement** disappears. This is **comparable** to the top of a tree **moving** with a **strong** breeze.

11. Anatomical plane: **Mobility** and the **anatomical plane** are **inter-related**. For **examination purposes**, the **bone** is **considered** to be a **fixed structure**. A **swelling** may arise from the **skin**, **subcutaneous tissue**, **muscle or tendon,** and lastly **bone. Swellings arising** or fixed to the **bone** are totally immobile. Those **arising** or **attached** to the **skin** can **easily be identified**. The **overlying** skin **cannot** be lifted off the **swelling.**

Most of the **problems** arise in relation to **swellings arising** from either the subcutaneous tissue or the muscle and tendon. The **clinical tests** that are described to **distinguish between the two** are **based** on the **anatomical**

of **healthy granulation tissue**. Thus an ulcer cannot be **classified** as **healing** in the **presence** of this **isolated clinical finding**.

Fig. 1.9: Sloping edge of a healing ulcer with healthy granulation tissue at the floor.

An **undermined edge** is seen in a **tuberculous** ulcer. The skin **overlies** a **part** of the **floor.** A **probe** can be **inserted under the edge** to **demonstrate** this **sign.**

Fig. 1.10: Undermined edge of a tuberculous ulcer.

Raised and everted edges are the hallmark of a **malignant ulcer**. It is also described as **rolled out edges.**

Basal cell carcinoma has **raised** and **beaded** edges.

Punched out edges are seen in **ischaemic** ulcers. They are also **described** in **syphilitic** ulcers, which are extremely rare. A **punched out appearance** may be seen after a **debridement** has been done **surgically.**

3. **Base:** The base is the **tissue** on which the ulcer **rests**. It could be formed by **subcutaneous tissue, muscle, tendon or bone**. The ulcer is **immobile** when the **base** is formed by the **bone.** The **mobility** of an **ulcer** is **restricted** if the **base** is formed by **muscle or tendon,** when **that structure** is put on **contraction against resistance.** The **clinical method** of examination is **similar** to that of a **swelling.**

Induration of the **base** is an **important finding** in a **malignant ulcer**. It is a **feeling** of **hardness** due to a **desmoplastic reaction** on the **part** of the **host** towards the **malignancy**. This is **best exemplified** in **squamous cell carcinoma.**

If the **bone** forming the **base** is **subcutaneous** (**venous ulcer in relation to the tibia**), it is

microcalcification, spiculation and **architectural distortion** are diagnostic of **malignancy**.

In patients with a **lump** proved as malignant, mammography is performed if **breast conservation surgery** is being planned. This is to rule out **multicentricity,** which is an **absolute contraindication** for **breast conservation**. Mammography of the **opposite breast** is performed in some patients to rule out the presence of **nonpalpable secondaries.**

Ultrasound:

Linear high-resolution probe 5-12 MHz is used to evaluate the **breast and axilla**.

1. The **primary role** of US is in the **diagnostic follow-up** of an **abnormality** detected in the **mammogram**, particularly in many **benign conditions**. It is used to further **evaluate masses** or asymmetries, and can very reliably differentiate a **solid mass** from a **cyst.**
2. But it is **less useful** in **asymptomatic patients**. However, if patient has a specific **complaint** (**lump, pain, discharge etc.**), US can be focused on that **particular area** and the necessary data **may be obtained**. Hence it is a very **good adjunct to mammogram**.
3. It can evaluate the **axilla that** is **clinically negative** for **enlarged nodes.**
4. It is the **first line** of imaging in a pregnant woman or in one who is below 30 years of age, so that unnecessary irradiation may be avoided.
5. It is also used to provide **guidance** for **biopsies** and other interventions.

Tissue diagnosis:

In a patient with a **suspicious mammographic abnormality** or a **palpable breast mass**, the obligatory diagnostic technique is **biopsy.** A preoperative **cytological diagnosis of malignancy** is **mandatory** before the **management strategies** are **planned.**

Fine needle aspiration cytology (FNAC). FNAC has been used for **years** to evaluate **breast lesions**. The usual report in a **malignant lump** is an **infiltrating duct carcinoma.**

Advantages:

1. It can be **easily performed** and **quicker interpretation** of the results is possible as compared with a **core needle biopsy**.
2. **US-guided FNA** helps in **accurate placement** of the needle.