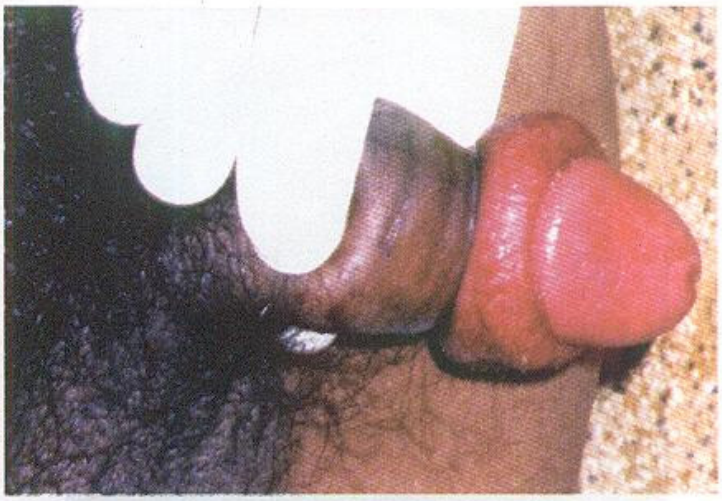

Fig. 7.16: Paraphimosis.

- After passing urinary catheter if prepuceal skin is not placed back over the glans paraphimosis can occur.
- It causes ring like constriction proximal to the corona and prepuceal skin. As a result the glans will be swollen, oedematous with severe pain and tenderness.
- Often glans will undergo necrosis or becomes gangrenous.

Treatment

- Manual reduction of prepuceal skin is to be tried.
- If not possible, *initial dorsal slit* is made to relieve the oedema and compression. Antibiotics and analgesics are given. *Circumcision is done after* 3 weeks.

DORSAL SLIT OF PREPUCE

Indications

- Paraphimosis.
- To do biopsy from a growth underneath the prepuce either in the glans or in prepuce itself.

After cleaning and draping, xylocaine plain (1%) is injected into the root of the penis circumferentially. Using two mosquito forceps oedematous prepuceal skin is held. Dorsally skin in midline is cut. Fibrous ring/constriction ring proximally is identified and is cut. Once released properly skin will move freely properly. 'V' shaped cut edge is sutured with continuous plain/ chromic catgut. Dressing is placed over the wound. Patient needs formal circumcision at a later period (after 3 weeks) once oedema subsides.

EXCISION OF THE SWELLING

- Swellings like sebaceous cyst, lipoma, pyogenic granuloma, Papilloma are excised usually under local anaesthesia. Dermoid cyst which is extending into the deeper plane should be excised under general anaesthesia.
- After cleaning and draping, xylocaine 1% injection is infiltrated around the swelling and underneath the swelling by lifting the swelling.

Incision

- In sebaceous cyst elliptical incision is placed encroaching the punctum.
- In swellings like lipoma/ganglion lineal incision is placed.
- In swelling like papilloma/pyogenic granuloma elliptical incision covering the entire lesion is placed.

Procedure

- Skin flaps on either side are raised adequately until edge of the swelling is clearly seen. Using scissor sharp dissection is done to remove the entire swelling. Bleeding points are cauterised/ligated. Skin is closed using non-absorbable monofilament polypropylene/ polyethylene 3-zero sutures.
- In a sebaceous cyst, capsule should be removed completely otherwise recurrence can occur. Often avulsion of the capsule also done to complete the procedure.
- In a large swelling like of large lipoma drainage tube may be kept for 48 hours.
- Dressing is placed. Antibiotics and analgesics are given.
- Suture removed in 5-8 days.

LYMPH NODE BIOPSY

Indications

- Lymphoma to find out the grade, type of lymphoma.

secondaries in lymph node only when NAC is inconclusive but clinically node is gnificant. Significant node is one which is sed on size (variable in different locations d type of primary but hard node > 1 cm significant) and texture (hard) probably rboring tumour spread. FNAC is the first hoice in secondaries as biopsy of node may lock the lymphatics and may allow spread f tumour to next level of nodes.
uberculosis of lymph node.
are lymphatic diseases.

of Node Selection for Biopsy

eck nodes—superficial/deep.
xillary node.
roin node: These nodes can often be non-pecific because of repeated recurrent nflammation. Hard, large sized node can be onsidered as significant.

cedure

ph node biopsy ideally should be done under eral anaesthesia. Superficial nodes/nodes er posterior triangle may be removed under l anaesthesia-xylocaine 1%.
After cleaning and draping, incision is placed allel to neurovascular bundle. Adequate ision is a must otherwise technique will be cult. After skin incision, fascia is incised. ph node is identified based on shape, colour texture. Node is separated from adjacent ctures. Node is held using Lane's tissue ding forceps. After removal haemostasis is intained. Node is cut to see the interior texture. fleshy in Hodgkin's lymphoma. It is yellowish eating in tuberculosis and dark, haemor-gic in secondaries. Skin is closed with errupted sutures using monofilament n-absorbable sutures. Sutures removed in days.
Ideally entire one node with its intact capsule uld be removed specially in lymphomas. ny times it may be difficult because of fibrosis adherent lymph nodes.

Complications and Difficulties

- Bleeding.
- Injury to major structures like nerves and vessels.
- Infection.

PLEURAL TAP (THORACOCENTESIS)

Indications

- Pleural effusion both diagnostic as well as therapeutic. The fluid is sent for culture, cytology, microscopy, specific gravity, biochemical analysis like proteins for diagnosis of tuberculosis, malignancy.
- In empyema thoracis, for diagnostic purpose before placing an ICT.
- Intrapleural administration of drugs.

Position

In sitting position, leaning forward over a wooden support.

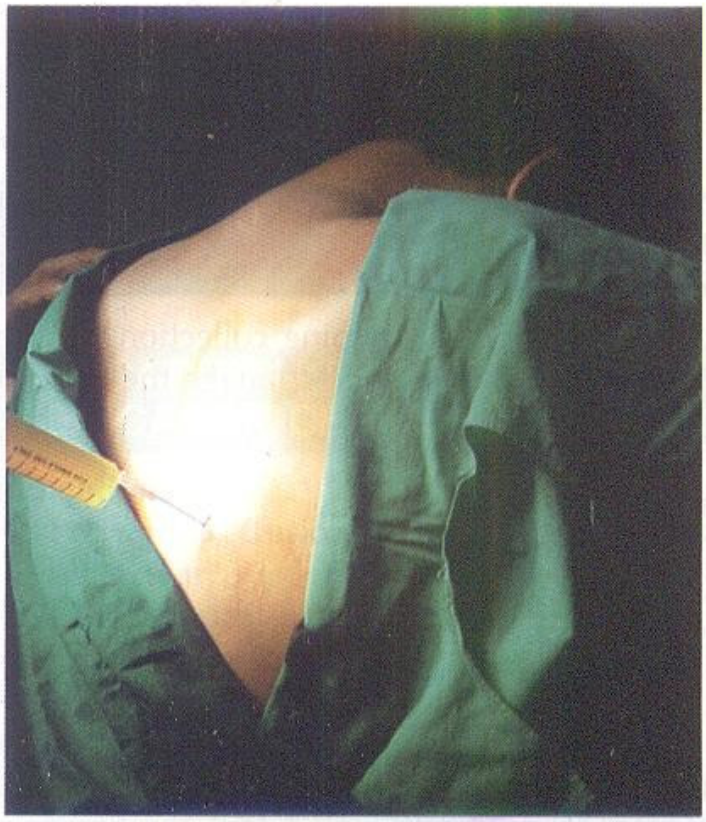

Fig. 7.17: Pleural tap. Note the position of the patient and placement of the needle.

Site

Tip of scapula at 7th intercostal space (posteriorly).

Procedure is done in sitting and leaning forward over a support. Tapping is done from behind. After giving local anaesthesia wide bore needle (Abraham needle) is used to tap the fluid. Needle with stopcock (3-way) is used. 50 ml syringe is connected to the stopcock. Fluid is aspirated to syringe from pleura with stopcock in straight position. Then knob is turned right angle to empty the syringe to reservoir. Procedure is repeated to clear the fluid.

For diagnostic tap, 50 ml of fluid is aspirated to send for biochemical/cytological analysis and culture.

For therapeutic aspiration—750-1000 ml per day is aspirated. If more quantity is aspirated rapidly, pulmonary oedema may develop leading to often ARDS which may be life-threatening.

Complications

- Infection.
- Dry tap or bloody tap.
- Sudden vagal shock.
- Pain and respiratory distress.

INTERCOSTAL TUBE DRAINAGE (ICT DRAINAGE)

It is the method of draining collections in the pleural cavity safely so as to make the lung to expand.

Indications

- Haemothorax.
- Pneumothorax.
- Haemopneumothorax.
- Empyema thoracis.
- Traumatic lung contusion.
- After thoracotomy to drain pleural cavity.

Procedure

- Patient is in 45° partial lying positions with backrest support. Under local anaesthesia (5 ml of 1% xylocaine injection), an ICT is placed in 6th or 8th intercostal space in case of haemothorax and pyothorax and in pneumothorax ICT is placed in 2nd or 3rd space.
- A small incision is made in midaxillary line (as the muscle bulk is less here and so passage of ICT is easier), parallel to intercostal space (above the rib, i.e. lower part of intercostal space to avoid injury to neurovascular bundle which are located in the groove in the lower part of rib). Tube with side openings is pushed into the pleural cavity.
- Other end is connected *to under water seal (200 ml of sterile water). Air-water column moving* with respiration can be observed. Tube is fixed with skin sutures.
- Usually for pneumothorax ICT is kept for 2-3 days (Till lung expands—Confirmed by check chest X-ray). For haemothorax and pyothorax it is kept for 4-6 days or until it stops draining and lung expansion is confirmed by repeat chest X-ray.

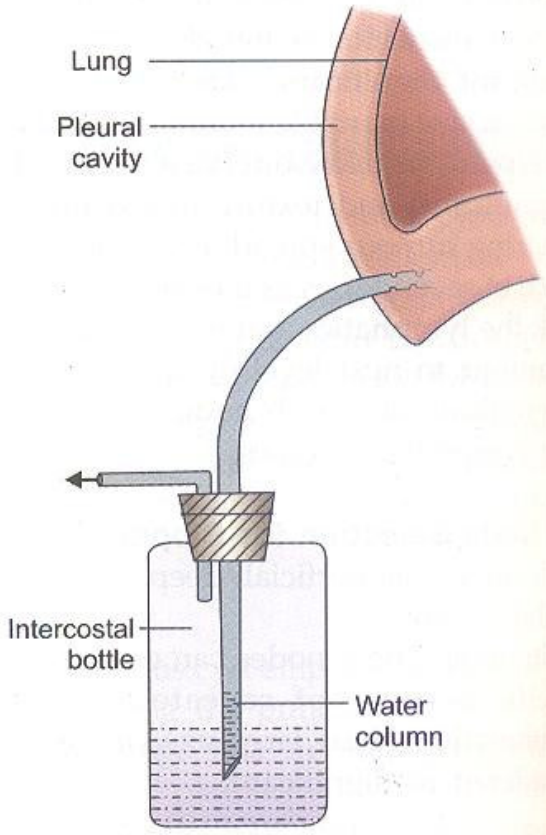

Fig. 7.18: Intercostal tube drainage under water seal

have a proper expansion of lungs patient asked to blow foot ball bladder (balloon) reathing exercise). If there is broncho-pleural stula, ICT should be placed for longer time ntil fistula heals.

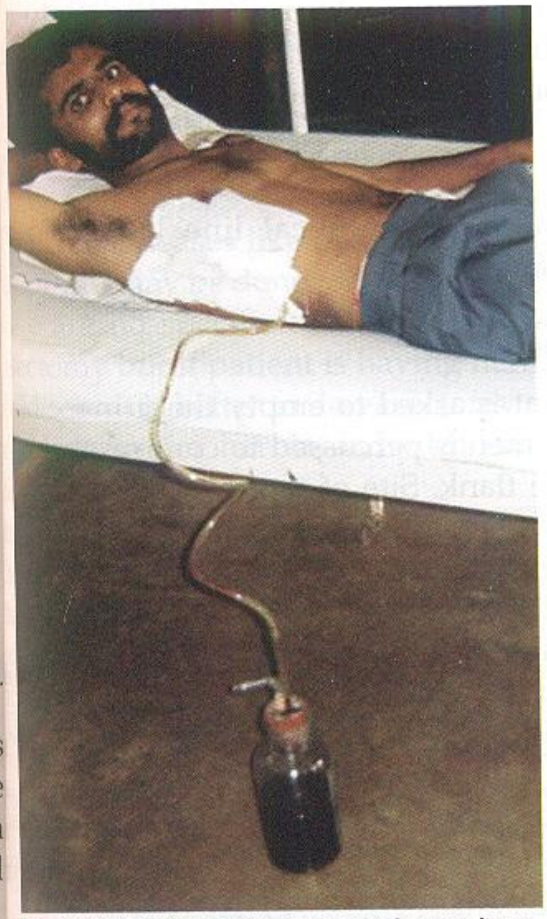

Fig. 7.19: Intercostal tube drainage in a patient with haemothorax.

plications and Problems

Infection.

Displacement and inadequate functioning.

Injury to intercostal vessels and bleeding.

Injury to intercostal nerves, lung and mediastinum.

Pain at the site of ICT placement.

RONCHOSCOPY

ications

gnostic: To take biopsy in carcinoma lung, g abscess, pulmonary tuberculosis.

apeutic: To remove foreign body, to suck out bronchial secretions.

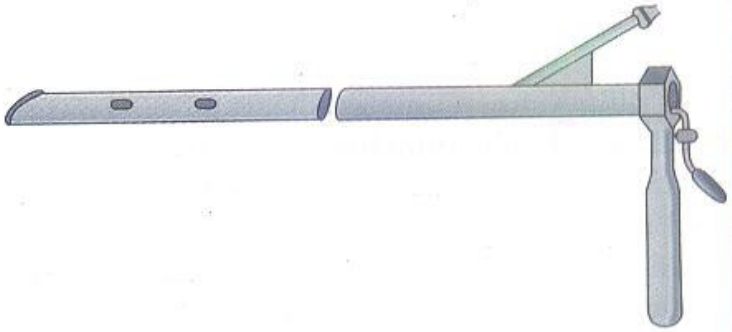

Fig. 7.20: Bronchoscope.

Types

- *Rigid bronchoscopy:* It is used for removal of foreign body, bronchial wash, etc. It reaches up to the third generation bronchioles. It is useful to take biopsy from carcinoma of proximal divisions but not from carcinoma of peripheral lung. Rigid scope has got multiple holes to allow ventilation during procedure (Oesophagoscope does not have side holes). It is done under general anaesthesia.
- *Flexible bronchoscopy:* It reaches up to 5th generation bronchioles. It can be done under local anaesthesia. It is mainly used for diagnosis and biopsy.

Complications

- Bleeding.
- Infection.
- Perforation.
- Bronchospasm.

PERICARDIAL TAP (PERICARDIOCENTESIS)

Indications

- Pericardial effusion due to any cause—viral, tubercular.
- Haemopericardium.
- Purulent pericardium.

Procedure

A 16 or 18-gauge needle is passed into the pericardium just below the xiphoid process directing upwards and backwards towards left side with an angle of 45° to the surface.