Wooden tongue depressor
Used for examination of oral cavity and oro-pharynx.
Metallic tongue depressor

1. Used for examination of oral cavity and
2. oro-pharynx +
3. naso-pharynx +nasopharyngeal mirror
4. cold spatula test (mist test) for choanal atresia
5. removal of F.B +
6. in minor operations +
Laryngeal mirror
Don’t use it in presence of increased gag reflex more than normal.
Replaced by flexible fiberoptic endoscopy (**enter from the nose**).
Used to see the larynx and help in removing F.B. with other instruments.
**Indirect laryngoscopy.**

Tongue wrapped in a piece of gauze cloth and held by the examiner between the left thumb and middle finger; Left index finger retracts out the upper lip. Laryngeal mirror is firmly against the uvula and soft palate.
Killian nasal speculum
Non self retaining.
Used for anterior rhinoscopy ➔ examination of anterior nasal cavity.
Used to remove the F.B. – minor operation.
KILLIAN NASAL SPECULUM

USES:
All nasal surgeries e.g. SMR, Septoplasty, Turbinectomy, Nasal polypectomy.
Thudichum
Self retaining.
Used for anterior rhinoscopy ➔ examination of anterior nasal cavity.
Used to remove the F.B. – minor operation.
**Crocodile forceps**

Has distal joint. Smaller than Tilly Henkel (4 cm)

1. Grommet (ventilation tube) insertion for treatment of otitis media with effusion
2. Used to remove F.B and clots,
3. wax removal,
4. biopsy,
5. packing.
TILEEY–HENCKEL FORCEPS

- Nasal polyp Excisional biopsy
  - Larger than Crocodile (10 cm)
Auroscope (Otoscope)
Contain: power, light, speculum, magnification lens.
Uses: examination, suction, drainage, removal of F.B, minor operations.

لا ينبغي أن يمسك مثل مسكت القلم
Ear (Aural) Syringe

Preparation:... The syringe has a nozzle for insertion into the external auditory canal. Water at body temperature is loaded into the syringe. The syringe is held by inserting fingers into the rings at the back. The third ring is on the piston that forces the water out when pushed.

• Indication:....
  1. Wax removal
  2. Foreign body removal
  3. Removal of otomycotic debris

Contraindication:... perforated tympanic membrane
True method of auroscopy
Aural dressing forceps
Aural Dressing Forceps:
the joint is proximal. It is used for insertion of wick inside the ear (ear dressing) in cases of otitis externa and during ear surgery.
Jobson horne probe

1. Used in removal of F.B,
2. cleaning or mobbing of nose and ear, (wax evacuation )
3. chemical cautery,
4. probing (differentiate between hematoma and polyp and turbinate)
**Jobson horn probe:**
- Removal of the foreign body
- Wax evacuation (ear)
- Chemical cautery (nose)
Telly’s nasal forceps
Used in removal of F.B
Arrest of bleeding (epistaxis) packing
TILLEY NASAL DRESSING FORCEPS
Metal Tracheostomy Tube
Not used as frequently anymore. Many of the patients who received a tracheostomy years ago still choose to continue using the metal tracheostomy tubes.

Cuffed (portex) tracheostomy tube
Used to obtain a closed circuit for ventilation
Tracheostomy Tubes

Silver Jackson tube
Uses or indication of tracheostomy

Types Emergent trcheostomy –elective temporary- perminant

1. Relief of upper airway obstructions subglottic stenosis, Ludwig angina, epiglottitis, F.B, laryngeal tumor, abductor cord paralysis
2. Respiratory insufficiency: head injury chest injury
3. Bronchial toilet (CVA, coma)

Complication

1. Hemorrhage
2. Apnea
3. Displacement of tt
4. Obstruction of tt
5. Surgical emphysema
6. Pneumothorax
7. Infection
Post-auricular cyst
Antrochoanal polyp

Description: mass dumppell large (5-6 cm), avascular (no bleeding), pale, whitish fibrostrak, yellowish color, gelly like appearance, with streak connected to other small red mass.

If inside the nasal cavity it is ethemoidal polyp (treated by local or systemic steroids)
Septal hematoma

History: child – trauma.

Exam: bilateral – painful – tender – color (red, white, blue).

Treatment: emergency surgical evacuation.
Septal deviation
History: adult – congenital or with trauma.
Exam: pale color – arise from one side only.
Management: septoplasty +/- rhinoplasty.
1- Tuning fork
2- Siegl’s speculum
3- Otoscope
4- Head mirror
5- Barany noise box
5-barany noise box uses masking of non test ear false negative Rinne test
1-Jobson horn
2-Killan nasal speculum
3-telly nasal dressing
4-
6-thudicum nasal speculum
7- laryngeal mirror
8-nasopharyngeal mirror
10 aural speculum
11- metallic tongue depressor
Bull’s eye lamp placed on left side of patient at the level of shoulder
30 cm ideal distance
Head mirror
Rigid nasal endoscopes

Fibreoptic nasolaryngoscope
RIGID BRONCHOSCOPE

USES:

DIAGNOSTIC
1. Hemoptysis; to find the site and cause for the bleeding.
2. Unexplained prolonged cough.
3. Suspicion of bronchial FB.
4. Suspicion of bronchial tumour; biopsy
5. As part of pan-endoscopy to look for synchronous or metachronous tumours.

THERAPEUTIC:
1. Removal of bronchial FB
2. Removal of viscid secretions in weak/unconscious patients
3. Dilatation of trachea.
4. Removal of benign lesions e.g. juvenile papillomatosis involving the trachea and bronchi.

IMPORTANT: COMPARE WITH ESOPHAGOSCOPE
1. Bronchoscope has side holes for ventilation of the opposite bronchus.
2. No graduations/markings which are seen in the esophagoscope.
Flexible fiber optic endoscope
Figure 74.4 Landmarks of a normal tympanic membrane (right side).
Use of Seigle pneumatic speculum

1. Checking tympanic membrane mobility
2. Insufflation of drugs
3. Fistula test

Use of seigle's pneumatic speculum to see mobility of tympanic membrane.
Rinne test

Weber test
Halipkin test

Benign paroxysmal positional vertigo
(A) Anterior rhinoscopy. (B) Technique of holding a Thudicum nasal speculum.
Posterior rhinoscopy. The examiner depresses the tongue and introduces posterior rhinoscopic mirror behind the soft palate.
Spatula test for patency of nose. A clean cold tongue depressor held below the nose while patient exhales. Mist formation on either side is compared.
Bimanual examination of mandibular salivary gland
Thyroglossal cyst
Mid line is it charactercsic
Rx:
Surgery (sistrunk operation)
Submandibular swelling
DDx
Submandibular sailoadinitis
Parotiditis (mumps)
Carcinoma of the larynx
Advanced stage
Threes tracheostomy tube scar
Vocal Cords Nodules
They are bilateral, small, grayish, white, localized thickening of the vocal cords situated at the junction of the anterior third and posterior 2/3 of the vocal cord.

Treatment
Small  Voice rest and speech therapy.
Large  Endoscopic excision followed by voice rest.
Laryngeal Polyp

Smooth unilateral glistening mass attached to the vocal cord.

Aetiology: Vocal abuse, heavy smoking and allergy.

On Examination:
Indirect laryngoscopy and fibroptic endoscopy: sessile or pedunculated mass arising from the vocal cord near the anterior commissure.

Treatment:
Endoscopic excision followed by voice rest and speech therapy. Histological examination is done to exclude malignancy.
Intubationa Granuloma

Aetiology

It results from injury to vocal process of arytenoids due to rough intubation,

RX

Removal with laser endo scope + voice rest
Juvenile Papilloma

Etiology: Virus $\rightarrow$ HPV.

Clinical Picture:
Hoarseness of the voice.
Stridor from interference with the laryngeal intet.

On Exam.
The papillomas are commonly seen at the anterior aspect of the vocal cords.

Endoscopic excision using LASER because
Interferon to prevent recurrence
Chronic laryngitis

Acute laryngitis

Steeple sign in croup
Thump sign in epiglottitis
Omega shape larynx
laryngomalacia
Chronic tonsillitis
Chronic pharyngitis
Case A in left side of the post:
Large kidney shaped TM perforation involving pars tensa of R ear with ossicles seen through the perforation and some
Dx Chronic suppurative ot media
PTA will show cond H loss with air bone gap
Case B the ear in the right side of the pist:
Attic perforation with purulent greenish discharge involving right ear mostly due to cholesteatoma
C/S in case of chronic ear infections show Gr negative bacteria and anaerobes
In this case Pseudomonas is likely
The clue is the greenish discharge
Membranous tonsillitis
Most likely infectious mononucleosis
Erysipelas
Otitis media with effusion
Acute pharyngitis

chronic pharyngitis
Plumer vinson syndrome
IDA
Figure 1.148
Early acute otitis media: stage of redness

The earliest changes in acute suppurative otitis media consist of redness, oedema and swelling in the pars flaccida [the upper fifth of the tympanic membrane]. In this patient the pars flaccida shows increased redness, oedema and marked outward bulging. (Left ear)
Normal Eardrum

Right Eardrum  Left Eardrum

Dr K.K. (Karade)

normal
Atrophic rhinitis
Lud wig angina