Tumours of the Oropharynx – Dr. Sherko

The common benign tumours from the oropharyngeal region include papilloma and pleomorphic adenoma.

Papillomas

- Papillomas usually arise on the soft palate or the faucial pillars and form mobile warty growths. They are mostly asymptomatic. Treatment is surgical excision.

Pleomorphic Salivary Adenoma

- Tumour may sometimes arise from the salivary glandular tissue distributed over the palate or faucial region.
- It is benign tumour with tendency to recur and a small portion (5%) may undergo malignant change. Macroscopically, the tumour is firm, lobulated with a capsule surrounding it.
- Microscopically it consists of epithelial cells in a hyaline stroma.
- Treatment is surgical excision.

Malignant Neoplasm of the Oropharynx

- The commonest malignant neoplasm of this region is the squamous cell carcinoma.
- Lymphosarcoma and reticulum cell sarcoma may arise from the lymphoid tissue.

Squamous Cell Carcinoma in the Oropharyngeal Region

- It may arise from tonsils, palate or the posterior pharyngeal wall. The disease is common in men than in women. There is strong relationship of this disease with smoking and betelnut chewing.
- Symptoms usually occur late in the disease. Patients usually present with soreness or discomfort in throat and difficulty in swallowing. Excessive salivation and an earache may be presenting features.
- Examination reveals a proliferative or an ulcerative type of lesion in oropharynx. There is a high incidence of lymph node involvement, particularly the upper deep cervical groups of nodes are involved.
- Diagnosis is confirmed by biopsy.
- Staging
  - T1: Tumour less than 2 cm in diameter.
  - T2: Tumour 2-4 cm in diameter.
  - T3: Tumour more than 4 cm.
  - T4: Massive tumours.
- Treatment
  - Radiotherapy is usually the treatment of choice for management of tumours of palatine arch, soft palate and posterior pharyngeal wall. Wide surgical excision with reconstruction of the oropharynx is the alternative modality of treatment.

Tumours of the Laryngopharynx

- This part of the pharynx lies posterior to the larynx and extends from the lower limit of the oropharynx up to the upper end of the oesophagus. It includes two pyriform fossae, the postcricoid region and the lateral and posterior pharyngeal wall.
- Benign tumours of this region are uncommon and present as smooth, slow-growing masses. The tumours of mesodermal origin are a little commoner than papilloma or adenoma.
Malignant tumours of the laryngopharynx are common in India. The aetiology is unknown, Plummer-Vinson syndrome is thought to be a precancerous condition. Betelnut chewing and smoking may play a part in its causation.

Cancer of the laryngopharynx commonly affects the males of the elderly age group except cancer of the postcricoid region which is commoner in females.

**Histology**

- Squamous cell carcinoma (moderately differentiated) is the commonest type of cancer of this region. Adenocarcinoma, adenoid cystic carcinoma, and malignant lymphomas may also rarely occur.

**Site**

- Pyriform fossa is the commonest site, followed by postcricoid and posterolateral pharyngeal wall cancer.

**Spread**

- Proliferative or ulceroinfiltrative type of lesions may occur. The growth may involve the aryepiglottic folds and spread to the larynx causing its fixation. Spread may occur to the thyroid cartilage and the growth may extend through the thyrohyoid membrane to the soft tissues of the neck.
- Downward spread involves the cervical oesophagus. Lymphatic spread is common and lymph node involvement occurs early. Deep cervical nodes and paratracheal nodes are commonly involved. Bilateral metastasis to the nodes may occur because of the rich lymphatic network. Distant metastasis to the lungs and other viscera may also occur.

**Clinical Features**

- The patient usually presents in the late stages when the growth is well advanced. The early symptoms are vague and the patient may complain of discomfort in the throat or pain on swallowing.
- Dysphagia is the main presenting symptom. It is usually complained of in the late stages and is progressive. The patient may present with a lymph node mass in the neck without any pharyngeal symptoms. Some patients present with pain in the ear (referred otalgia) or a muffled voice.

**Diagnosis**

- Indirect laryngoscopy usually reveals the growth in the laryngopharynx.
- Pooling of saliva in the pyriform fossae is suggestive of an obstructive lesion and should arouse suspicion. Neck examination reveals lymph node involvement or the tumour mass. Laryngeal crepitus may be absent particularly in postcricoid malignancy.
- X-ray of the soft tissues of the neck shows a soft opacity in the laryngopharyngeal region and possibly cartilage involvement. Barium swallow show a filling defect at the tumour site as well as reveals the lower extent of the growth.
- Hypopharyngoscopy and direct laryngoscopy are done to determine the site of growth, its extent and to take the biopsy. Biopsy is confirmatory. X-ray of the chest is taken to rule out secondaries in the chest.

**Treatment**

- Surgery or radiotherapy alone have not given good results. Therefore, the present consensus is to treat the laryngopharyngeal malignancies with combined therapy of surgery and radiotherapy. Usually a preoperative dose of about 5000-6000 rads of cobalt-60 is given over 5-6 weeks. This is followed by surgery, which may be either partial pharyngectomy with total laryngectomy or total pharyngo-laryngectomy.
Affections of the Parotid Gland

Mumps

- Mumps is caused by the mumps virus which spreads by droplet infection. It affects mainly children of school-going age and young adults. Most cases occur in spring. The incubation period is 18 days.
  
  **Clinical Features**
  - Malaise, fever and pain in the angle of jaw is soon followed by a tender swelling of one or both parotid glands. The submandibular salivary glands may also be involved. The swelling subsides in a few days.
  
  **Complications**
  - Orchitis, pancreatitis and encephalitis are the usual complications.

**Treatment**
- Isolation, care of oral hygiene and symptomatic treatment is instituted. Difficulty in opening the mouth may need feeding through a straw. Steroids are given in cases where orchitis develop.

Acute Parotitis

- Infection reaches the parotid gland either from the mouth or through blood. In severe cases the causative organism is staphylococcus aureus. The infection is often confined to one parotid gland.

**Aetiology**
1. Acute parotitis may result from the following.
2. Postoperative
3. As a complication of debilitating diseases like typhoid and cholera
4. Secondary to obstruction of Stensen's duct. This may be due to parotid calculus and foreign bodies
5. As a complication of septicaemia
6. Idiopathic

**Clinical Features**
- There is a painful swelling on the side of the face. Sings of toxaemia are usually present. Temperature is over a 100°F. Pus can be expressed from the Stensen's duct.

**Treatment**
- Treatment involves cleaning the mouth corrections of dehydration and administration of antibiotics.
- In fulminating cases, decompression of the parotid salivary gland is done. An incision is made down to the capsule of the gland as used for parotidectomy. The skin is reflected anteriorly to expose the surface of the gland. The capsule is incised transversely. The skin is closed with interrupted sutures and drainage is provided at the lower end of the wound.

Chronic Parotitis

- Chronic parotitis is more common than acute cases. The condition is frequently bilateral but may be unilateral. Purulent saliva can be expressed from the Stensen's duct if gentle pressure is exerted over the gland. A parotid calculus must be excluded by X-ray.

**Sialography** reveals sialectasis, calculus, or stenosis of the duct.

**Treatment**
- Catheterising the Stensen's duct with a fine ureteric catheter and injecting antiseptic fluid such as 1% mercurochrome or tetracycline are resorted to. These measures can be repeated if necessary. In long standing cases, parotidectomy is done.
Parotid Calculus

- Parotid Calculi are uncommon as compared to submandibular calculi. The patient complains of a painful swelling or glad occurring especially at meals.

- Treatment
  - If a stone is found in the Stensen's duct, it can be removed by splitting the duct. If the parotid is deeply placed within the partoid tissue, the gland is exposed and calculus is removed through a transverse incision in the gland substance. If multiple stones are present superficial lobectomy should be done.

Affections of the Submandibular Glands

The commonest cause of the involvement of this gland is a foreign body in the duct or a stone.

Calculus

- The commonest sites for salivary calculus are within the submandibular gland or its duct (Wharton's duct). It is fifty times more frequent here than in the parotid gland and its duct. This is because salivary secretions from the submandibular gland are more mucoid and are rich in calcium. These salivary calculi consist of phosphates of calcium and magnesium.

- Clinical Features
  - Painful swelling of the gland before or during meals is characteristic of this condition. The patient should be given fruit juice to sip at the time of clinical examination. Little or no saliva pours out from the orifice of Wharton's duct on the affected side. A stone in the Wharton's duct can be detected bidigital palpation.
  - Salivary colic sometimes occur at the commencement of a meal. A calculus in the Wharton's duct or in the gland is seen in the lateral or occlusive view of the submandibular region

- Treatment
  1. Stones in the duct should be removed under local or general anaesthesia. The tissues immediately behind the stones are grasped with tenaculum forceps, which steady the stone and elevate it. An incision is then made in the long axis of the duct and the stone slips out. The wound is left unsutured.
  2. Stones in the gland necessitate removal of the gland.