Today's Topic-

Occult Primary

- Presented By-

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Definition

- Occult primary is a disease in which squamous cell cancer spreads to lymph nodes in the neck and it is not known where the cancer first formed in the body.

Common sites

- Nasopharynx
- Tonsil
- Pyriform sinus
- Base of the tongue.

Detection rate

- Clinically occult tumours with CT or MRI is about 15-20%.

Clinical Features

- A lump in the neck.
- Pain throat

Physical Exam. and History:

- An exam of the body especially the head and neck to check general signs of health.
- Checking for signs of disease, such as lumps or anything else that seems unusual.
- A history of the patient's health habits and past illnesses and treatments will also be taken.

Diagnosis of occult primary tumour

Endoscopy: A procedure to look at organs and Tissues inside the body to check for any abnormal areas.

- The larynx
- Pharynx
- Esophagus
- Trachea and
- Bronchi.

Diagnosis of occult primary tumour

Biopsy

- Two types :
  - Fine-needle Aspiration (FNA) Biopsy:

    The removal of tissue or fluid using a thin needle.
  - Excisional biopsy:

    The removal of an entire lump of tissue.

Bronchoscopy:

- A procedure to look inside the trachea and large airways in the lung for abnormal areas.

Investigations

- Sinus x-ray
- Chest x-ray
- MRI
- PET scan (positron emission tomography scan).
- CT scan.
- Serum tumor marker test.

  The test will be done to detect the following tumor markers:

  - Alpha-fetoprotein (AFP).
  - Beta-human chorionic gonadotropin (ß-hCG).
- A diagnosis of occult primary tumor is made if the primary tumor is not found during testing or treatment.

Factors affect prognosis and treatment options

- The number and size of lymph nodes that have cancer in them.
- Whether the cancer has responded to treatment or has recurred (come back).
- How different from normal the cancer cells look under a microscope.
- The patient's age and general health.

Spreads of cancer

Three ways

- Through tissue- to surrounding normal tissue (direct invasion).
- Through the lymph system - to other places in the body.
- Through the blood -to other places in the body.

Treatment Options

Different types of treatment are available for patients with metastatic neck cancer with occult primary.

Two standard treatment are -

- **Surgery**
- **Radiation therapy**

Surgery

Neck dissection

- Radical neck dissection
- Modified radical neck dissection
  - Type 1
  - Type 2
  - Type 3
- Selective Neck Dissection
- Extended Neck Dissection

Radiation therapy

- High-energy x-rays or other types of radiation are used to kill cancer cells.

There are two types of radiation therapy.

- External radiation
- Internal radiation

Chemotherapy

- Chemotherapy is uses of drugs to stop the growth of cancer cells.

Two Types

- **Systemic Chemotherapy**

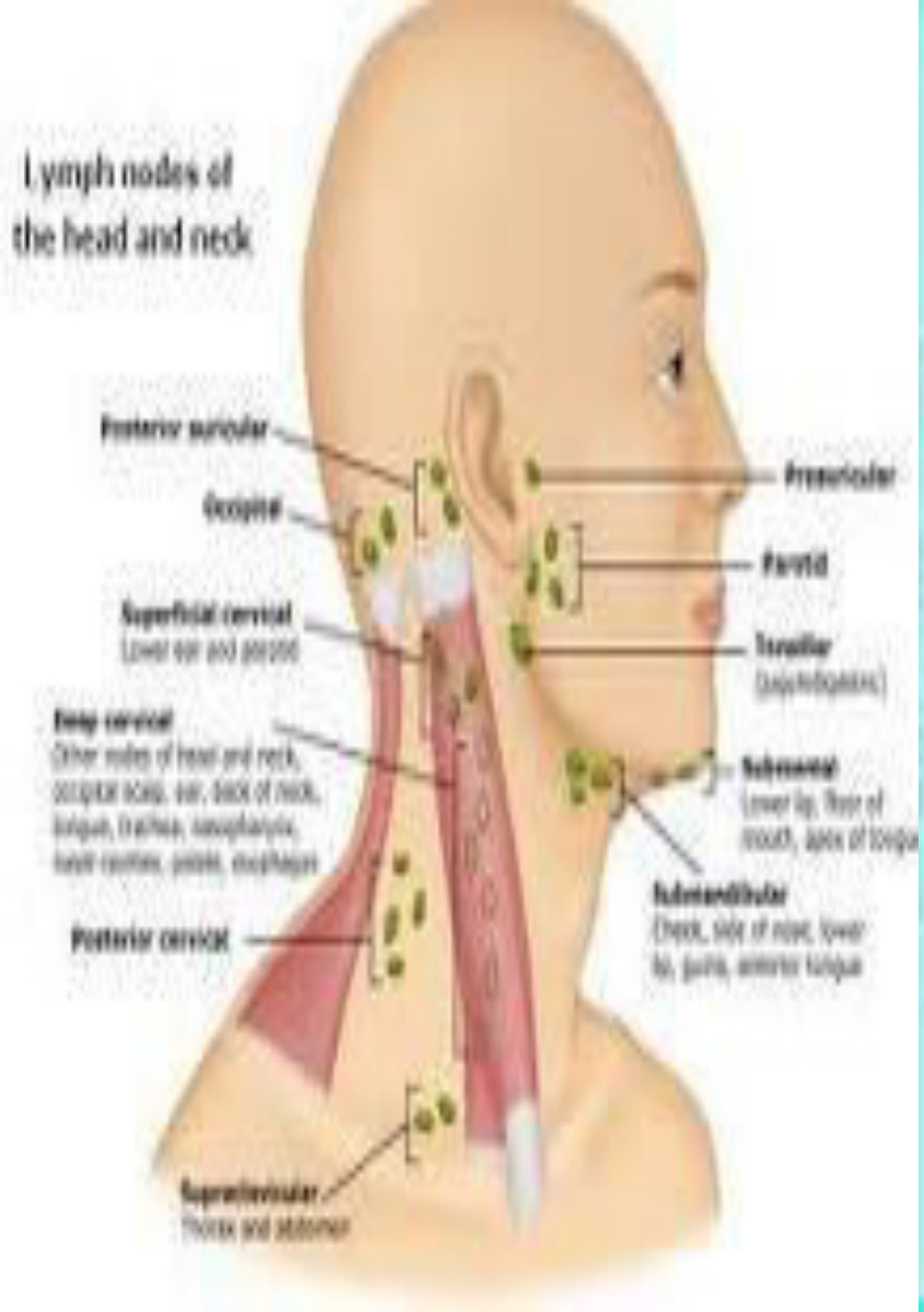
  When chemotherapy is taken by mouth or injected into a vein or muscle.

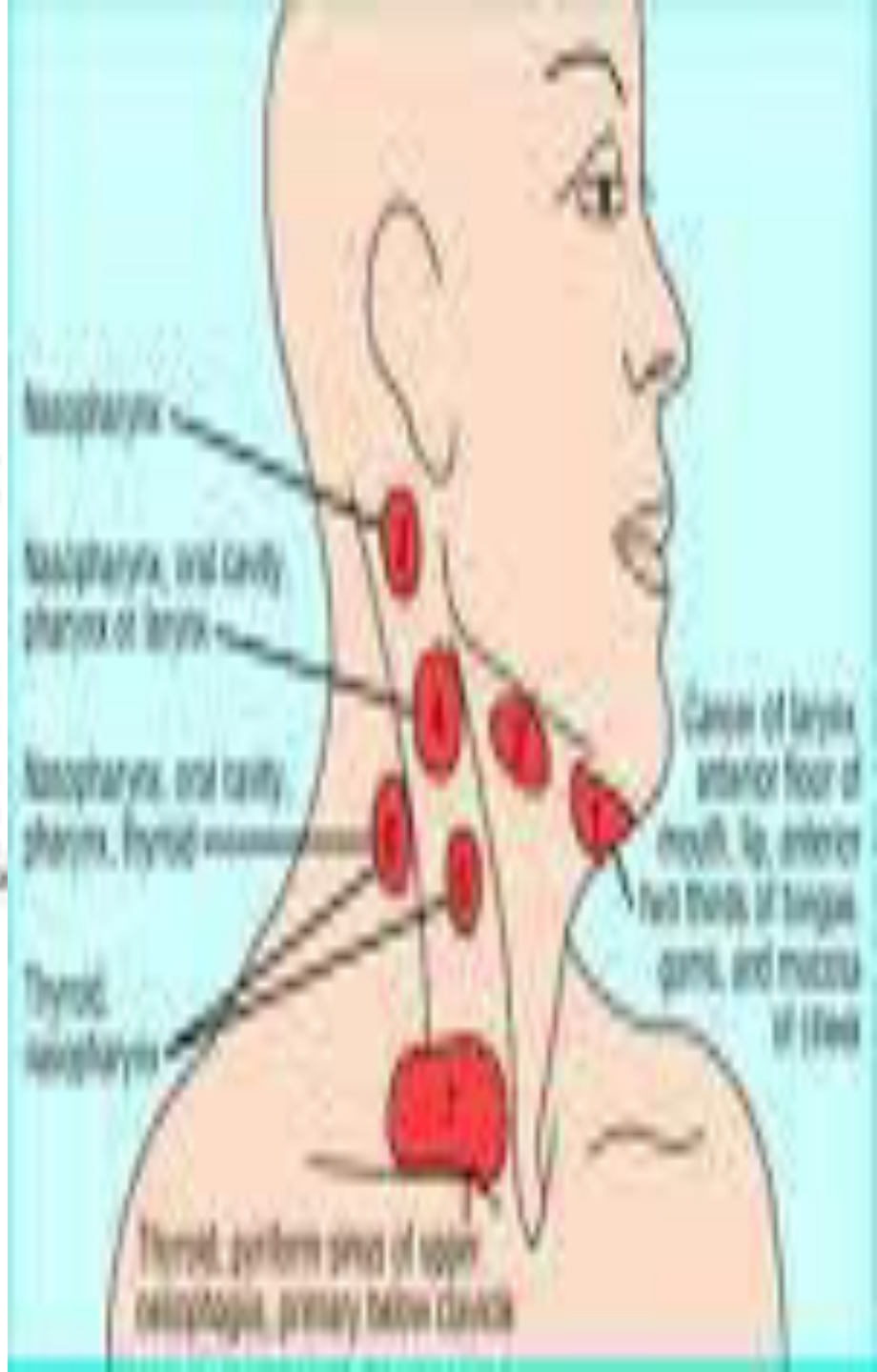
- **Regional Chemotherapy**

  When chemotherapy is placed directly into the spinal column, an organ, or a body cavity such as the abdomen.

Neck Dissection

- The neck dissection is a surgical procedure for control of neck lymph node metastasis from squamous cell carcinoma (SCC) of the head and neck.
- The aim of the procedure is to remove lymph nodes from one side of the neck into which cancer cells may have migrated.


Lymph nodes of the head and neck
Occipital
Parotid
Submental
Submandibular
Posterior cervical
Supraclavicular


Nasopharynx
Thyroid, nasopharynx

Neck Dissection

Metastasis of squamous cell carcinoma into the lymph nodes of the neck reduce survival rate.

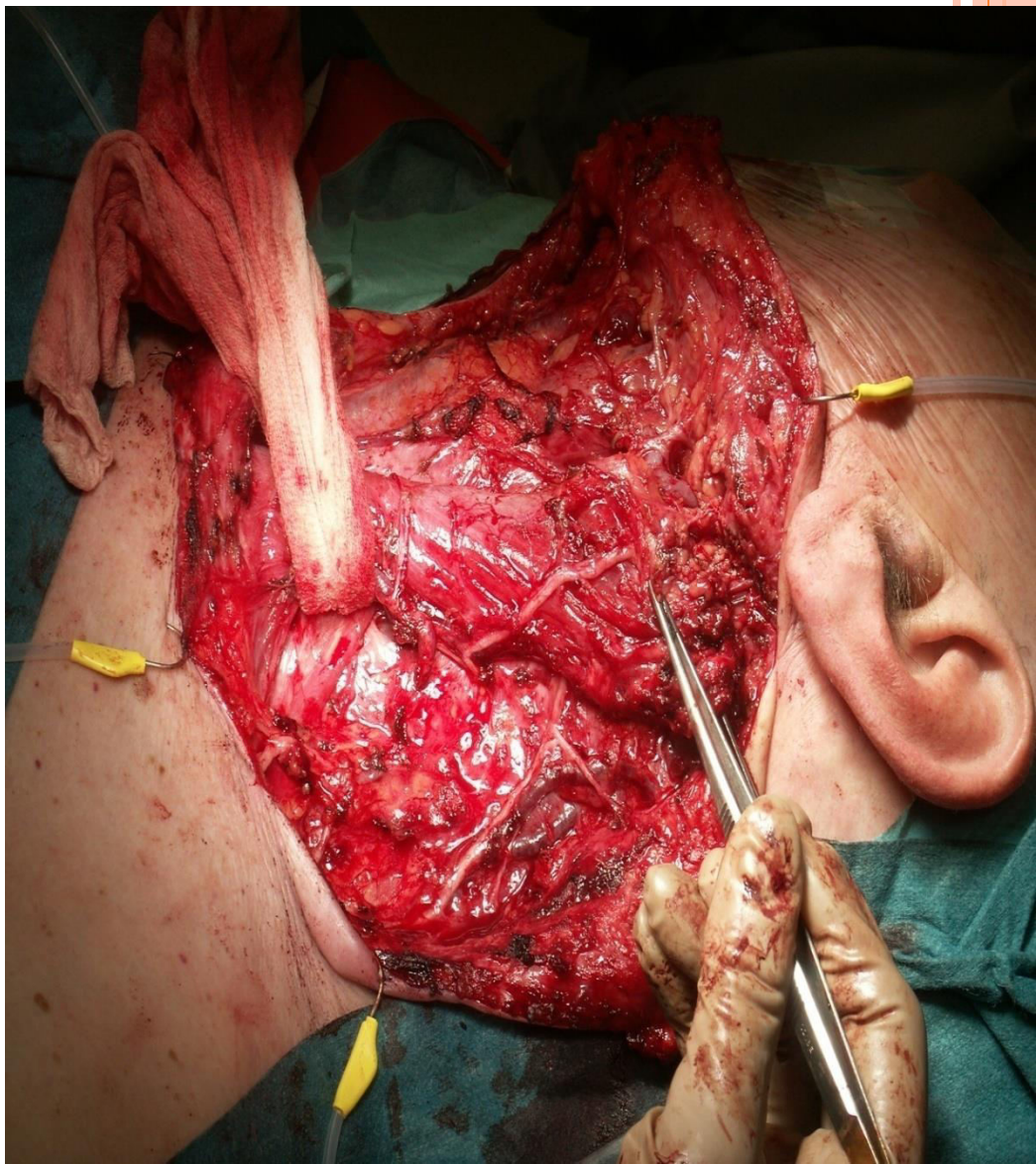
The metastases may originate from SCC of

- Upper aerodigestive tract,
- Oral cavity,
- Tongue,
- Nasopharynx ,
- Oropharynx, hypopharynx,
- Larynx,
- Thyroid gland,
- parotid and posterior scalp.

Radical Neck Dissection (RND)

- Definition:

  Removal of all Ipsilateral cervical lymph nodes from levels I to V together with spinal accessory nerve, sternocledomastiod muscle and Internal jugular vein.



RADICAL NECK DISSECTION (RND)

Indications

- Metastatic lymph node in the neck from a known primary sq. cell ca in the upper aerodigestive tract,
- Metastasis of unknown origin.

Contraindications

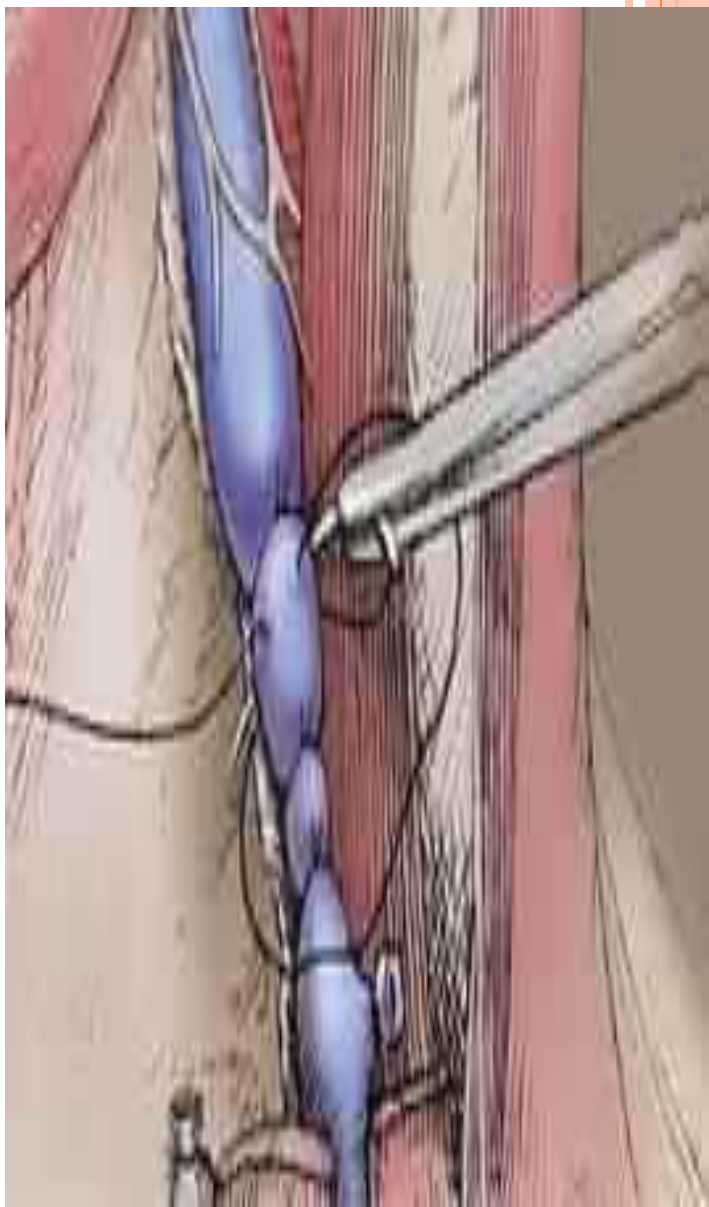
- Uncontrolled primary cancer,
- Evidence of distant metastases
- Patient is unfit for major surgery
- Mass fixed to the cervical plexus, brachial plexus and trachea.
- Unresected nodes unchanged by radiotherapy and chemotherapy.

MODIFIED RADICAL NECK DISSECTION (MRND)

- Surgery to remove all the lymph nodes in one or both sides of the neck with preservation of one or more important structures like spinal accessory nerve, sternocledomastiod muscle and internal jugular vein.

Types of MRND

- Type 1: spinal accessory nerve is preserved. IJV and sternocledomastiod muscle are resected.
- Type 2: spinal accessory nerve and IJV are preserved.
- sternocledomastiod muscle is resected.
- Type 3: All three vital structures spinal accessory nerve, IJV and sternocledomastiod muscle are preserved.



INDICATION OF MND

- 1. Operable Palpable Neck Disease N1,N2a, N2b.
- 2. Occasionally performed for N0 neck

- **Selective Neck Dissection (SND)-** cervical lymphadenectomy with preservation of one or more lymph node groups that are routinely removed in a RND.

- **Extended Radical Neck Dissection** - This refers to removal of one or more additional lymph node groups or nonlymphatic structures, or both, not encompassed by the RND.

Complications of Neck Dissection

Early

- Haemorrage
- Airway obstruction
- Increase Intracranial pressure
- Carotid Sinus Syndrome
- Nerve injury
  - Lower Cranial- (vii-xii)
  - Phrenic Nerve
  - Brachial Plexus
  - Recurrent laryngeal Nerve

COMPLICATIONS OF NECK DISSECTION

Intermediate:

- Basal Collapse
- Bronchopneumonia
- DVT
- Chylous Fistula
- Seroma
- Infection
- Failure of the skin healing
- Carotid artery rupture
- Flap failure

Complications of Neck Dissection

Late

- Primary Recurrance
- Lymph Node Metastasis
- Distant Metastasis
- Lymph oedema
- Hypertropic scars

FOLLOW-UP SCHEDULE

- Long-term follow-up is required.
- Patients with malignant tumors are followed every 1-3 months for two years, then every 4-6 months.


Thank you ...