

THE EVALUATION AND MANAGEMENT OF NECK MASSES OF UNKNOWN ETIOLOGY

DR.K.K.DESARDA

PROF.& HEAD – ORL

K.E.M. HOSPITAL PUNE.

NECK MASSES



Branchial Cleft Cyst



Goiter



Infected Cyst



Deep Cervical Abscess



Lymph Node Metastasis



Submandibular Abscess



Neck swellings

Differential diagnosis

- Neck divided into ant. And posterior Triangle by sternocleidomastoid
 - Cervical lymphadenopathy commonest cause of neck swelling
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Neck Swellings

D/D (benign)

- Congenital swellings; branchial cleft swellings, thyroglossal duct cyst, laryngocoele, haemangiomas, cystic hygromas, dermoid.
 - Inflammatory: acute & chronic lymphadenitis(infectious mononucleosis, toxoplasmosis, cat scratch fever, Actinomycosis, histoplasmosis, tuberculosis
 - traumatic: aneurysms, av malformation, torticollis, etc
 - Pharyngeal pouch, cervical ribs, thyroid, etc
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Neck swellings

- ❑ **Branchial cleft cyst**
 - ❑ Remnants of incompletely obliterated branchial clefts/pouches
 - ❑ Located anterior & deep to sternomastoid
 - ❑ Painless swelling
 - ❑ Young adults
 - ❑ M= F ratio
 - ❑ Unilateral, 75% on left side
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Neck swellings

- **Thyroglossal duct cyst**
 - 70% of all congenital cysts
 - Arrested migration of thyroid
 - Painless midline swelling
 - Sistrunk operation
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Neck swellings

- ❑ **Cystic hygroma**
 - ❑ Collection of lymph sacs
 - ❑ Present at the root of neck(post. Triangle), arm, groin.

 - ❑ **Pharyngeal pouch**
 - ❑ Pulsion diverticulum
 - ❑ Uncoordinated swallowing

 - ❑ **Sternomastoid tumour**
 - ❑ Birth trauma, infarcted segment , fibrosis, torticollis
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Neck swellings

- ❑ **Cervical rib**
 - ❑ Extra cervical rib
 - ❑ < 1% population
 - ❑ Neurological and vascular problems

 - ❑ **Ranula**
 - ❑ Mucous containing cyst in floor of mouth
 - ❑ Painless midline, spherical, smooth, fluctuant, transilluminant

 - ❑ **Dermoid cyst**
 - ❑ Midline, asymptomatic, painful when infected

 - ❑ **Laryngocoele**
 - ❑ Diverticulum of laryngeal ventricle
 - ❑ Lined by epithelium
 - ❑ Common in glass blowers/wind instruments musicians, etc
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Neck swellings

Tumours

- ❑ Benign; Carotid body tumour, lipoma, soft tissue tumour
 - ❑ Malignant: skin tumours(SCC, BCC, melanomas), thyroid tumours, salivary gland tumours

 - ❑ **Carotid body tumour**
 - ❑ Sporadic occurrence 90%
 - ❑ Familial 10%
 - ❑ Unilateral, but bilateral/multicentric 10% sporadic, 50% bilateral familial
 - ❑ Grows 0.5 cms/year
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ASSUMPTIONS :

1. Any neck mass in adult population represent malignant metastasis until proven otherwise.
 2. Primary tumor may be occult and remain so despite all diagnostic studies.
 3. A diagnosis of malignant disease or metastasis implies histologic proof of malignancy.
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ASSUMPTIONS:

4. The nature and location of primary malignant tumor and its metastasis ultimately determine both the prognosis and effectiveness of the treatment to be used.
 5. Surgical violation or distribution of cervical facial planes without removing all the malignant tumor may diminish the chances for cure.
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EVALUATION OF THE MASS

- Location

 - Cephaloid -- neck primary and good prognosis.

- Caudal -- abdominal primary and poor prognosis.

- Posterior triangle – primary from nasopharynx.

- Anterior triangle -- primary from nasopharynx, larynx, oral cavity, thyroid, salivary glands, unilateral or bilateral or midlines.



NECK MASS.....

2. Size: larger than 4 cm-poor prognosis.
 3. Consistency : cystic-congenital
Solid-neoplastic.
 4. Fixation : fixed or mobile
 5. Pulsations : carotid mass.
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RULE OF SEVEN....

1. Mass present for seven days is inflammatory.
 2. Mass present for seven months is neoplastic.
 3. Mass present for seven years is congenital.
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GENERAL-EVALUATION

- History:
 - Age ,sex ,occupation ,race ,habits ,gen. Health, associated symptoms ,and family history.
 - Physical examination in general.
 - ENT examination in detail.
 - Fiber optic nasopharyngo-laryngoscopy.
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LABORATORY STUDIES....

1. Blood cyto, BSL, Blood Urea, Serum Cr., Enzyme Studies.
 2. Thyroid Functions.
 3. Serum Antibodies for NPC.
 4. Serology for Syphilis
 5. PFT, HIV studies.
 6. FNAC.
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RADIOLOGICAL STUDIES

1. Plain x-ray neck ap and lat.
 2. Plain x-ray chest ap and lat.
 3. Barium meal, swallow ,Enema.
 4. Sialography,pyelogram, Laryngogram,
 5. Carotid Angiography.
 6. Thyroid and parotid scans.
 7. MRI studies
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PAN ENDOSCOPY-BIOPSY

- Oral cavity, tongue, tonsils.
 - Tonsillo-lingual sulci and retromolar sites
 - Nose and nasopharynx.
 - Rosenmuller fossae.
 - Laryngo-pharyngo-oesophagscopy, bronchoscopy.
 - Neck biopsies are contraindicated prior to panendoscopy.
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TREATMENT POLICY...

- ❑ Based on provisional diagnosis after thorough investigations
 - ❑ Cystic masses like branchial cysts, thyroglossal cysts are excised locally.
 - ❑ Inflammatory masses are treated with antibiotics and drainage.
 - ❑ Laryngoceles, Cystic hygromas, pharyngeal pouches excised locally.
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TREATMENT POLICY.....

- Neoplastic masses need radical excision with rnd and pre or post op radiation therapy as per lesions.(Larynx,pharynx, oesophagus, thyroid and parotid)
 - 5% primaries are not detected so prepare for biopsy and frozen section considering the possibilities of tb,reticulosis, do local excision, for ca, do RND and follow the pts at monthly interval.
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SPECIAL CONSIDERATIONS.

1. The single most important point in the treatment policy is that an open biopsy of the gland must not be performed in the first instance.
 2. If there is primary H & N tumor present and later RND together with excision of the primary in continuity is performed then the five year survival plan is seriously affected by previous biopsy with possible implantation in to the skin and Lymphatics.
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NECK MASSES CONTINUED





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NECK MASSES CONTINUED





NECK MASSES CONTINUED



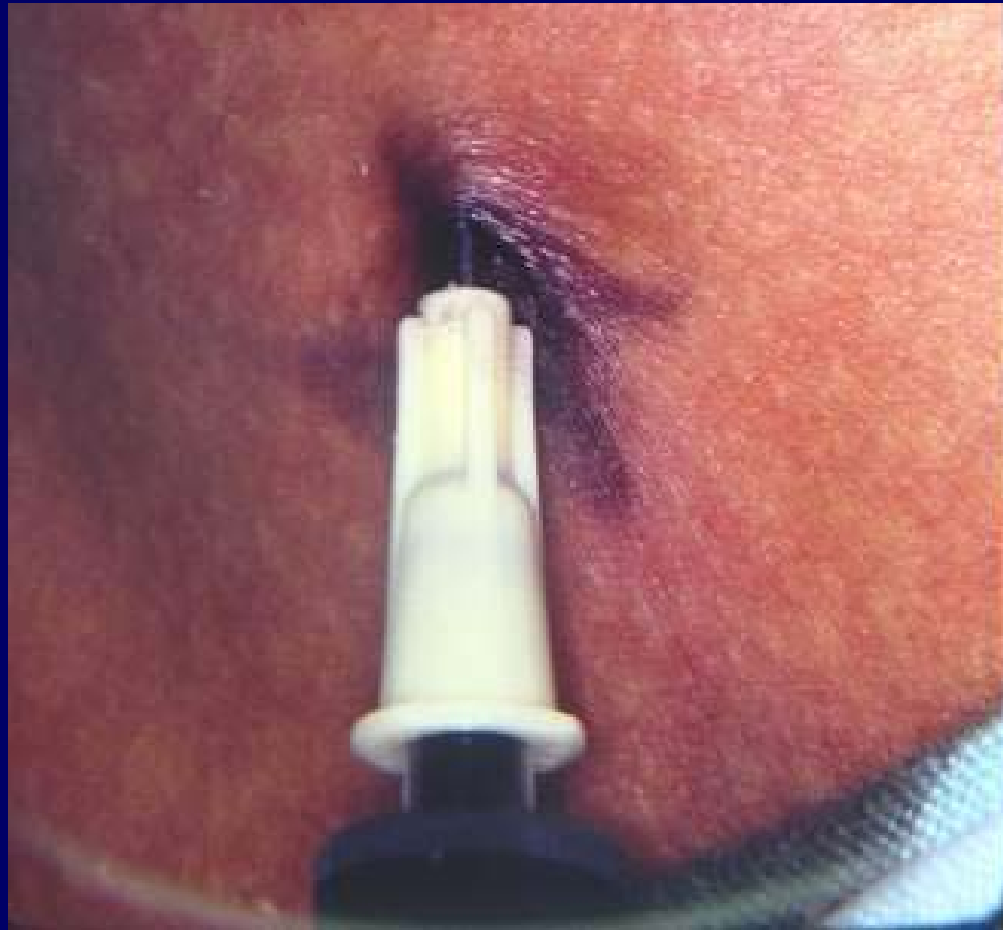


NECK MASSES CONTINUED





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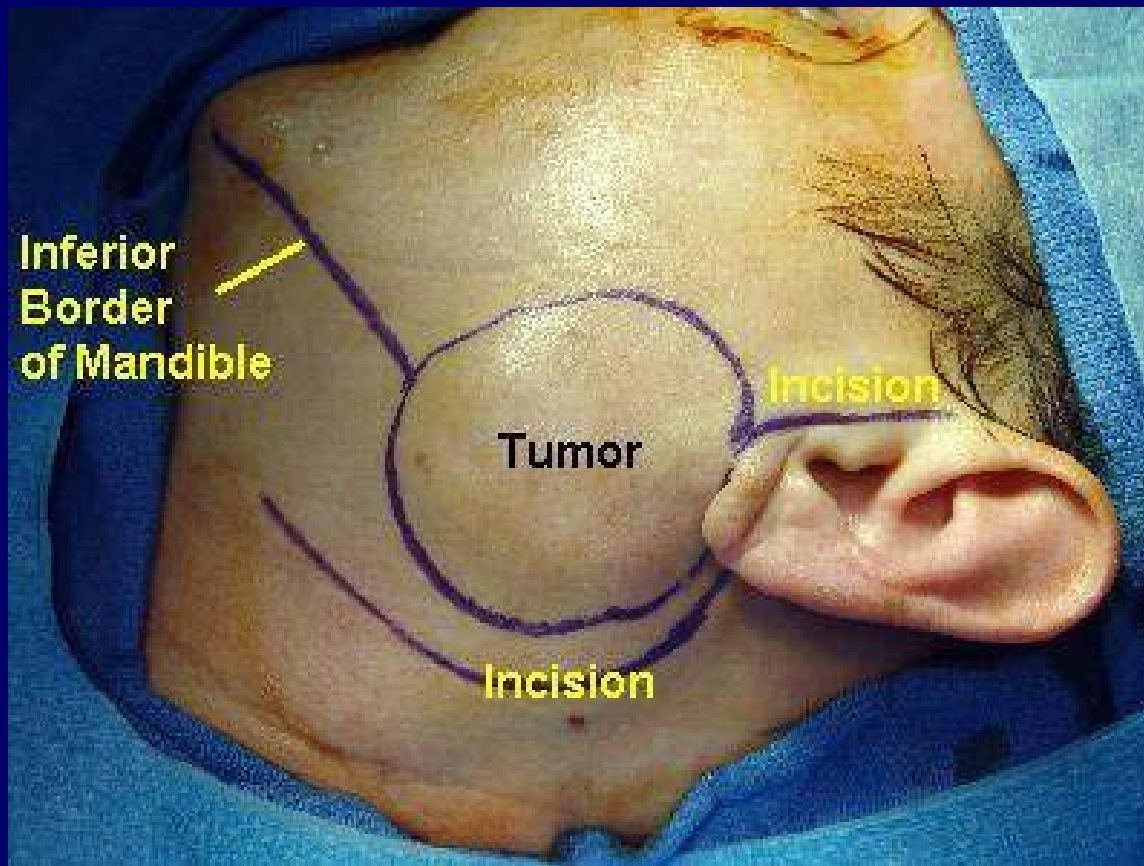




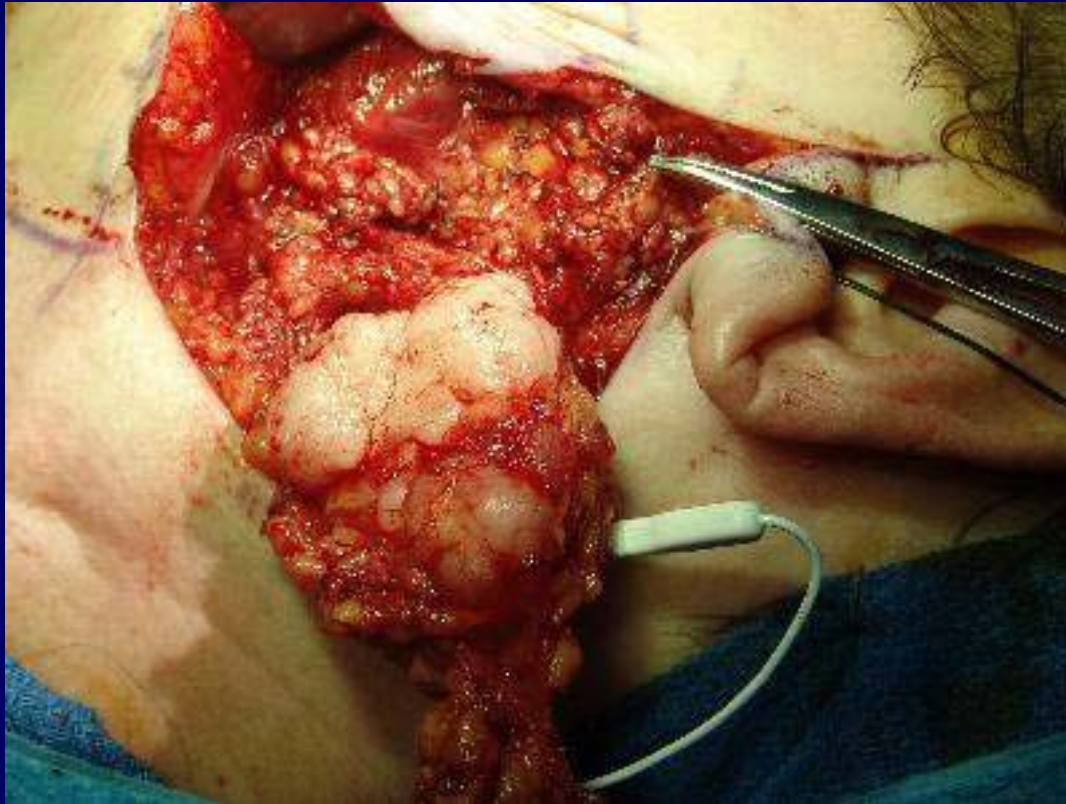
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NECK MASSES CONTINUED





NECK MASSES CONTINUED



Thank You

The image features a 3D-rendered text graphic that reads "Thank You" in a white, elegant cursive script. The letters are thick and have a slight shadow, giving them a three-dimensional appearance. The text is positioned diagonally across the center of the frame. The background is a dramatic sunset or sunrise scene. The sky is filled with a gradient of colors, from deep purple at the top to bright orange and red near the horizon. There are some wispy clouds, and a bright sun is visible just above the horizon line. Below the horizon, there are dark, silhouetted hills or mountains. In the foreground, there is a body of water that reflects the colors of the sky, creating a shimmering effect.