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NEW CANCER TREATMENT WITH NEW TECHNOLOGY

Pandikovil Ring Road, Madurai

THYROID CARCINOMA MANAGEMENT

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HON. SECRETARY, ASSOCIATION OF SURGEON OF INDIA, TAMILNADU CHAPTER

EPIDEMIOLOGY AND STATISTICS

- Commonest malignant Endocrine tumour.
- Comprise 1% of all malignancies.
- Sex Ratio is 3:1 (Female:Male)
- Aggressiveness increases with old age.

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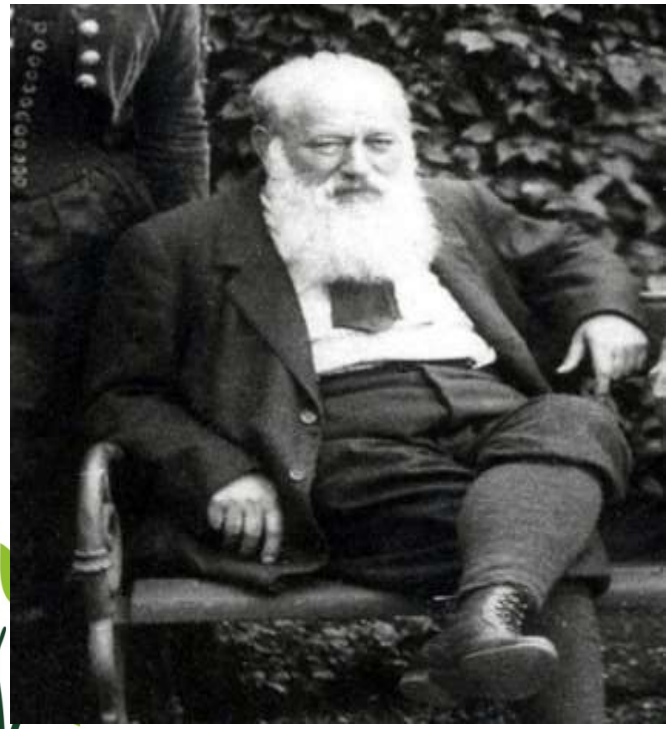
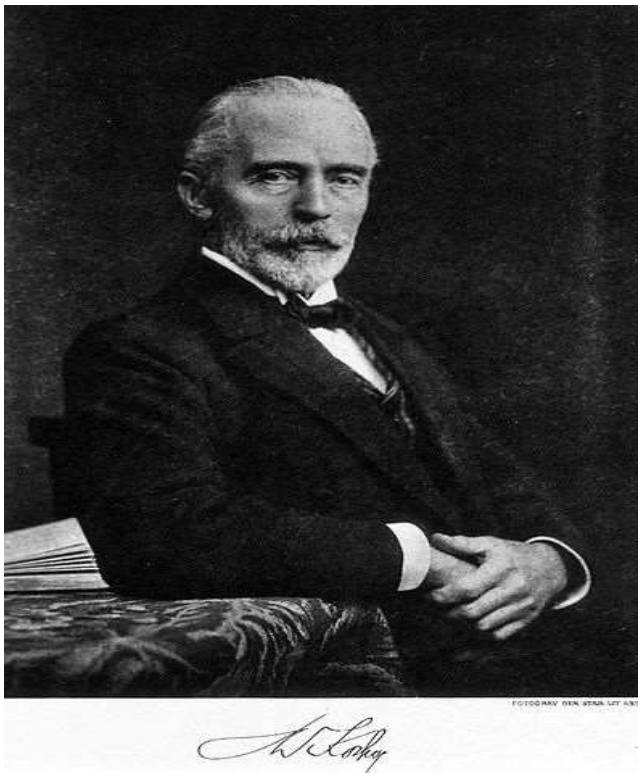
Theodor Bilroth



Emil Theodor Kocher
Nobel Prize 1909



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- animation

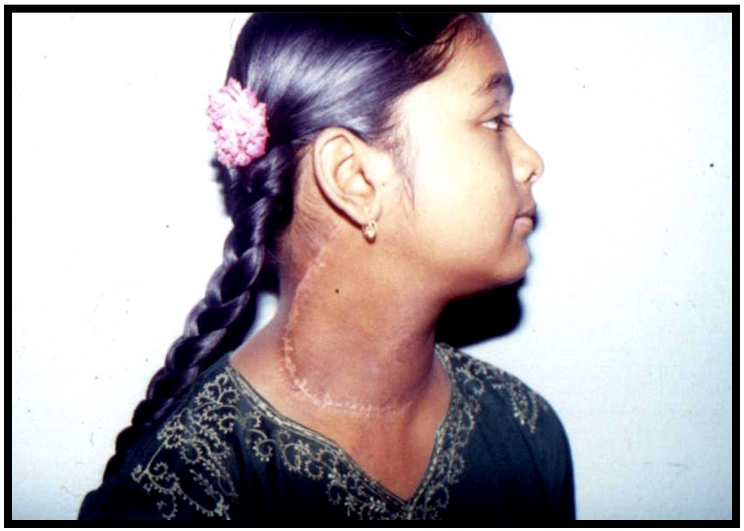
IMPACT ON AGE

Age is Incorporated in thyroid staging

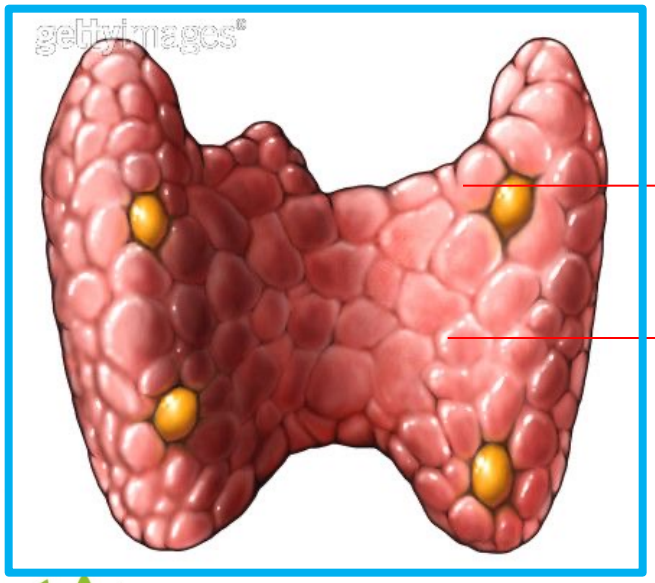
FOR AGE LESS THAN 55 YEARS ONLY 2 STAGES

STAGE 1 – WITHOUT METASTASIS

STAGE 2 – WITH METASTASIS



PATHOLOGY



Follicular cells → Differentiated → Papillary
Differentiated → Follicular
Differentiated → Hurtle Cell

Parafollicular cells → Medullary

THE HISTOLOGY OF THYROID GLAND

FOLLICULAR CELLS	PARA FOLLICULAR "C" CELLS	LYMPHOCYTES
•PAPILLARY •FOLLICULAR •HURTHLE •ANAPLASTIC	MEDULLARY CARCINOMA	LYMPHOMA NON-HODGKINS

MALIGNANCIES ARISE FROM ANY OF THESE CELLS

TO BE DISCUSSED…

1) Thyroid Cancer

a) PTC

b) FTC

c) MTC

d) Anaplastic

2) Oncologist Role

PRESENTATION

The most common presentation is a

painless neck mass
solitary thyroid nodule.

THE GOAL.....

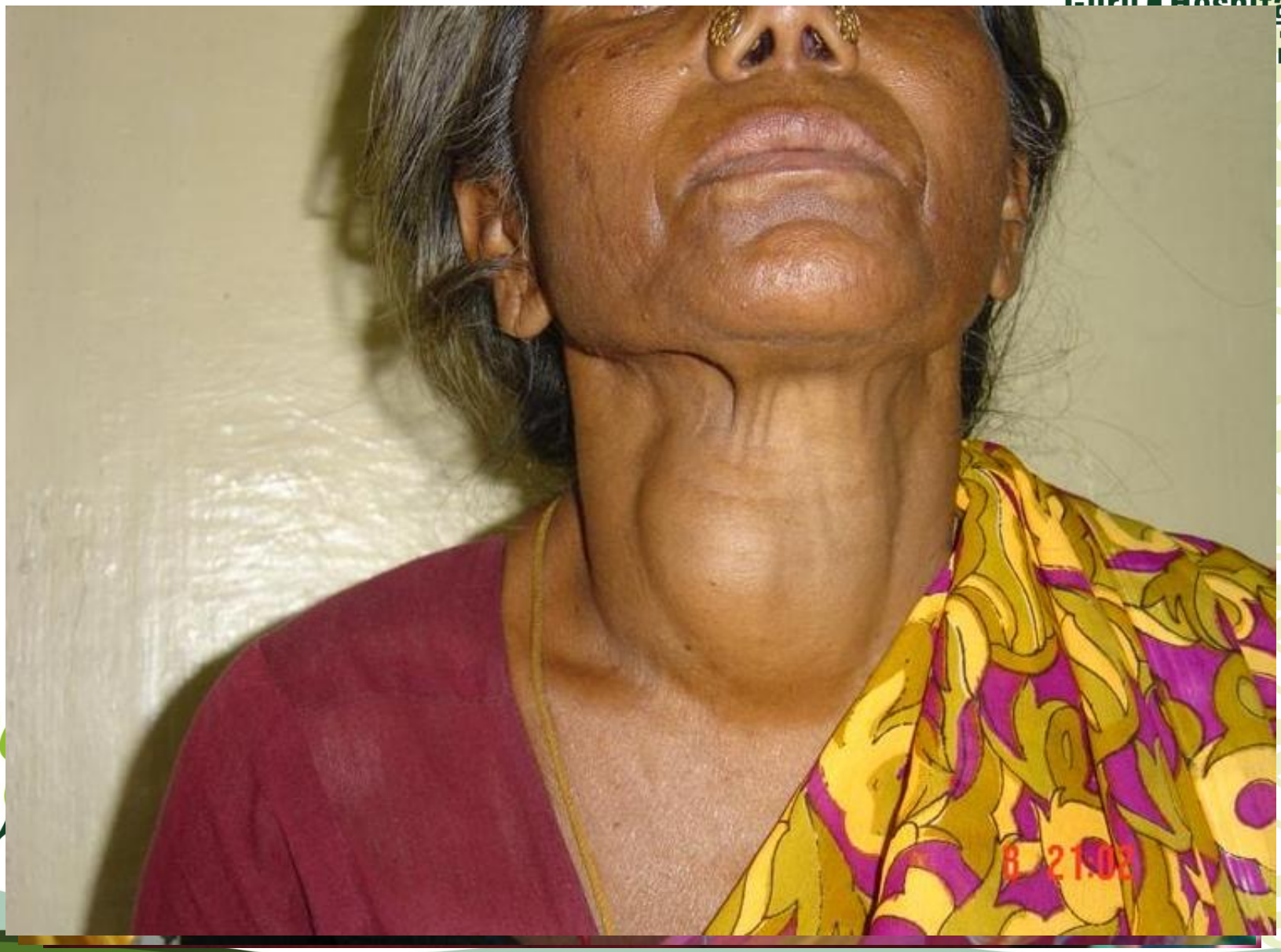
- Differentiate malignant from benign.

.

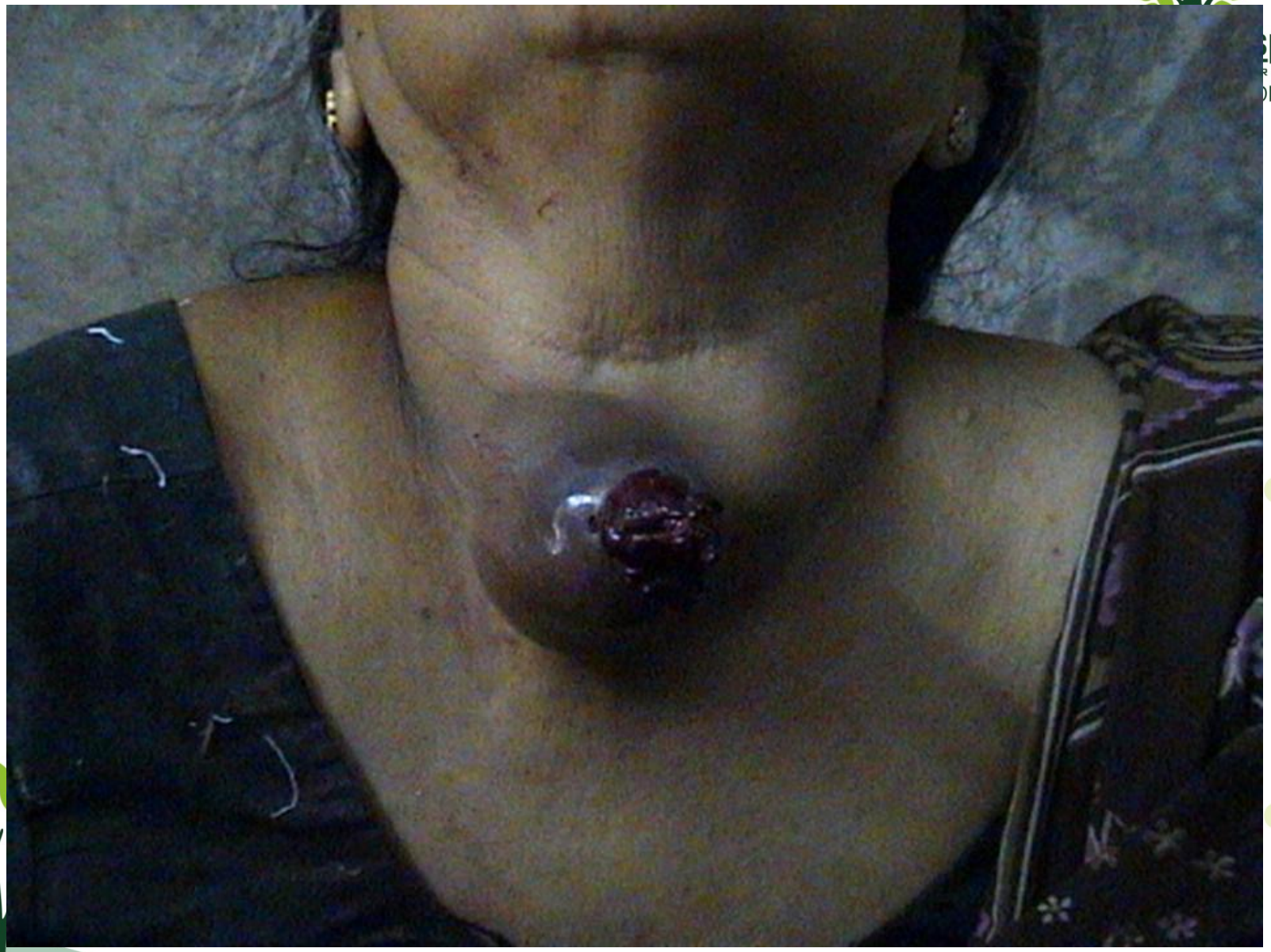
ORDER OF INVESTIGATION

- CONFIRMATION OF DIAGNOSIS
  - FNAC
- TO ASSESS INVASION , NODAL STATES
  - CT scan M R I
- METASTATIC WORKUP
  - X-ray chest

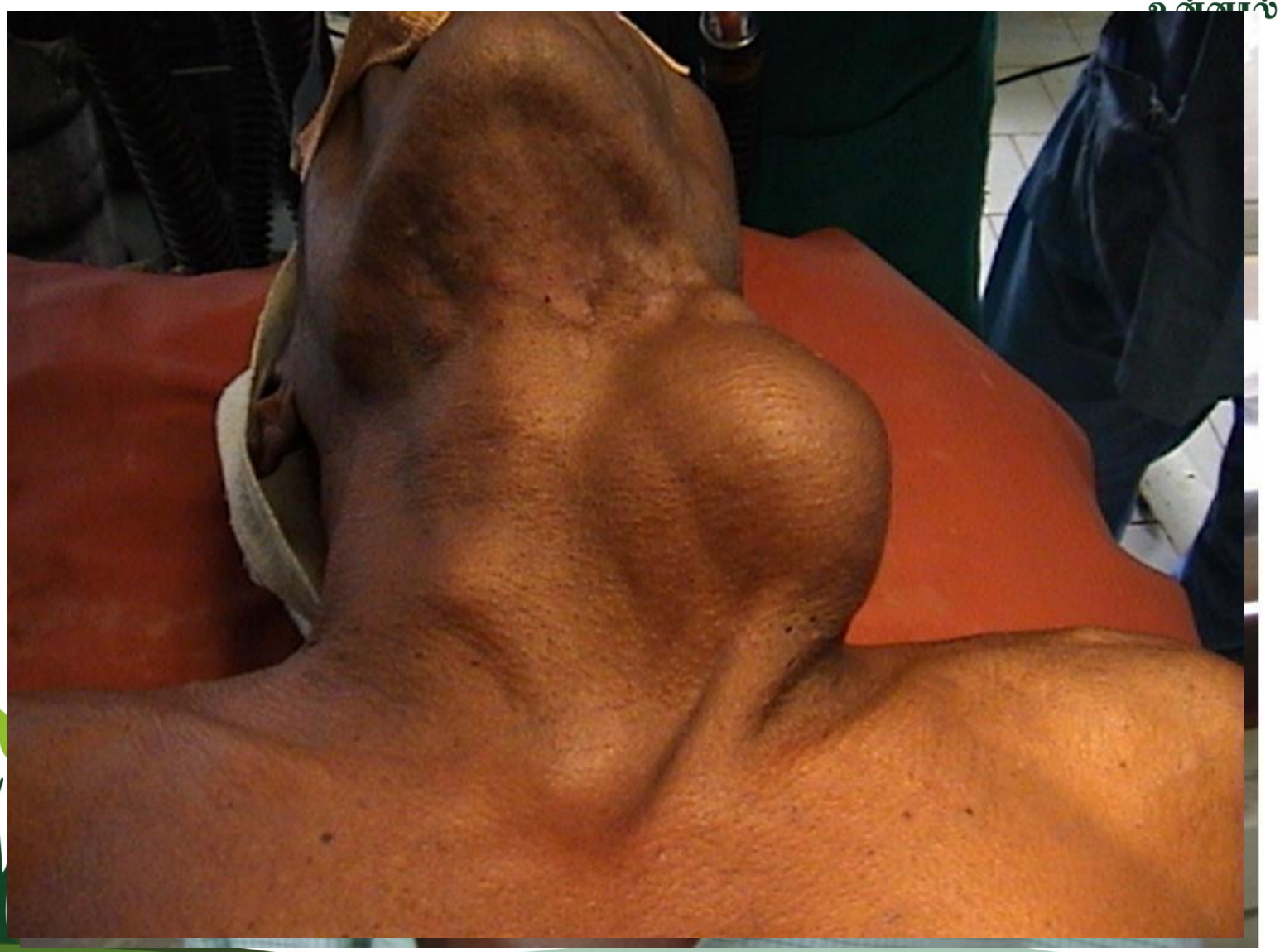
BENIGN LESION



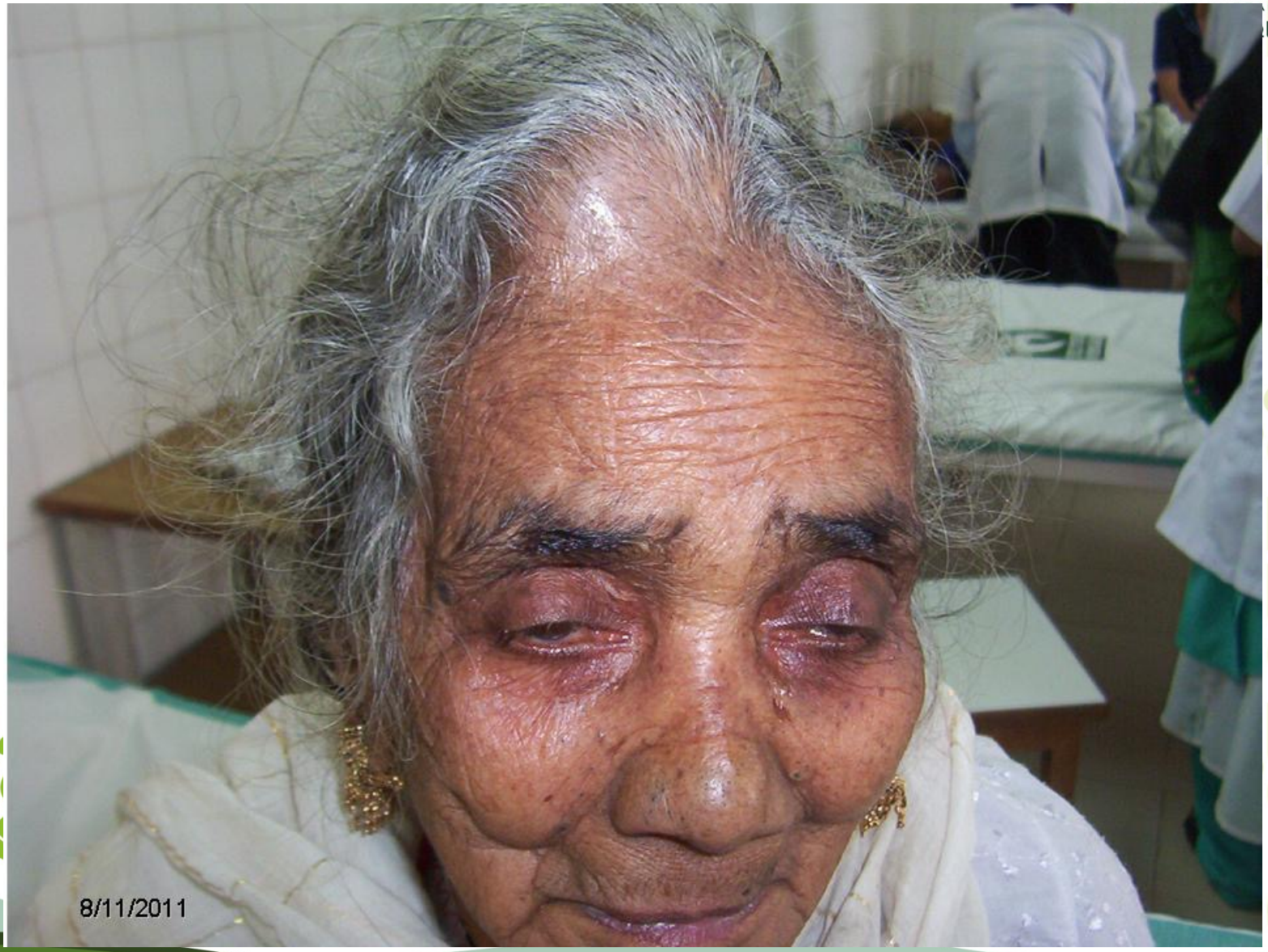
MALIGNANT LESION

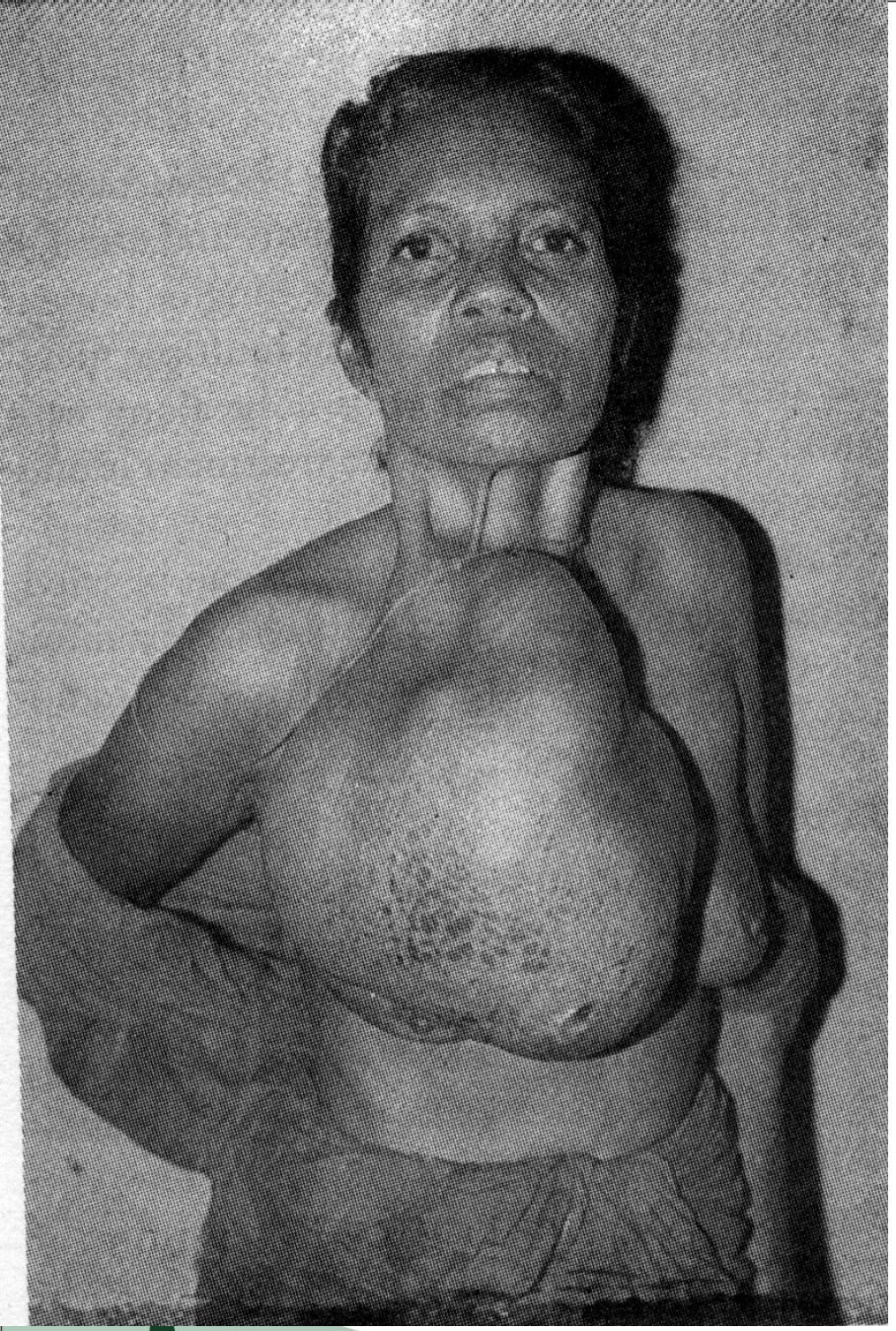


CERVICAL NODE



METASTASIS





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FOLLICULAR CARCINOMA OF THYROID

WELL DIFFERENTIATED CARCINOMA: PAP.CA & FOLLICULAR .CA

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- Total throidectomy
- With paratracheal dissection &
- ipsilateral FND for node positive cases

- Radioiodine therapy –
- All follicular ca &
- Papillary ca > 4 cm

- Tsh suppression – Eltroxin

Standard Treatment of Thyroid Cancer

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Total Thyroidectomy

↘ RAI Ablation

↘ Suppression Therapy

↘ 1 Year

Whole Body Scan
Tg Assay

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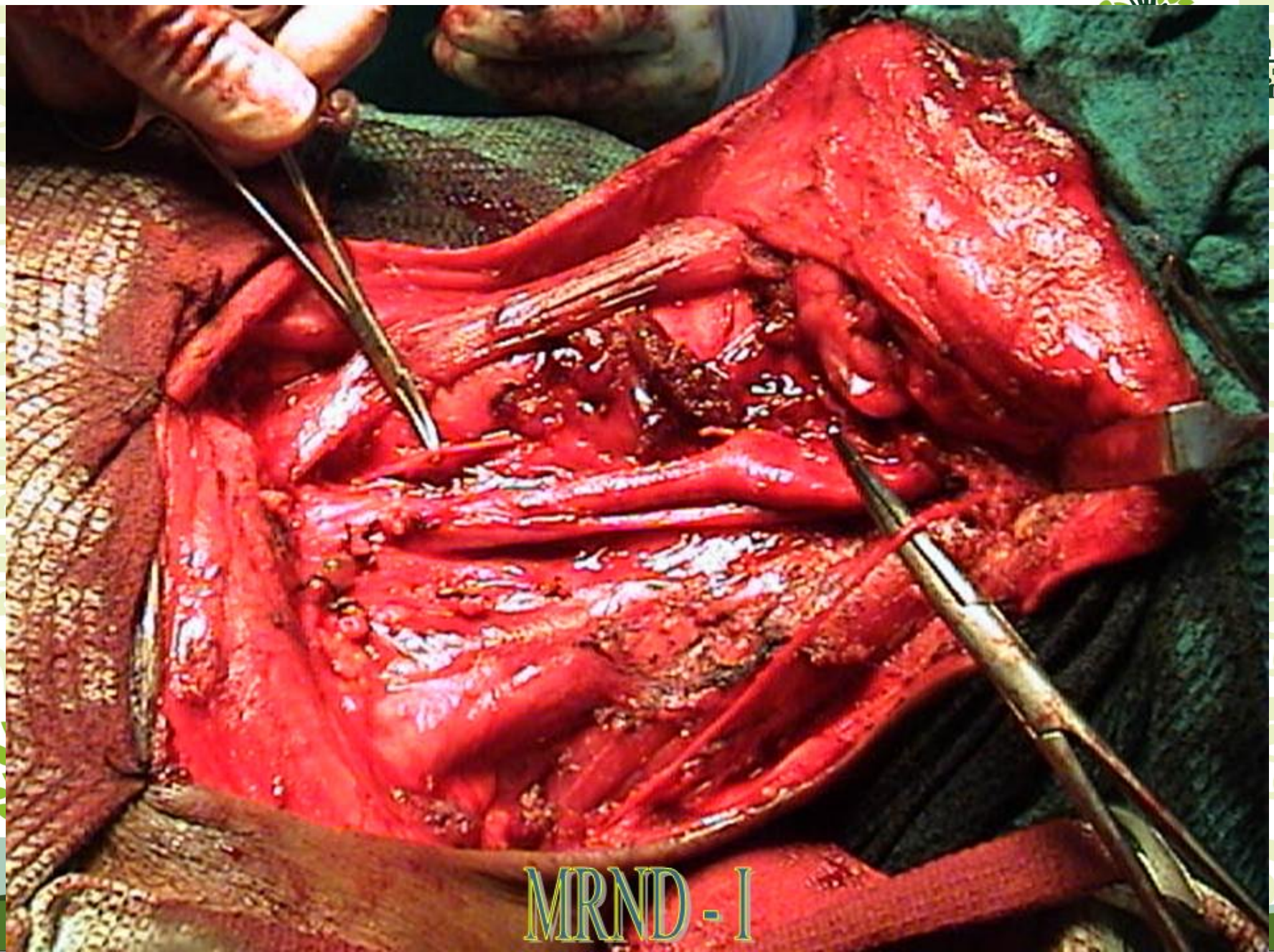
- TOTAL THYROIDECTOMY


MRND - I

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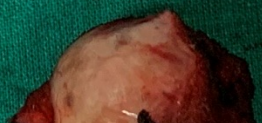
20/6/2

MRS. MARIYAMMAL
W/O KARTHIK

32/FEMALE.

DIAGNOSIS: CASE OF LINGUA
THYRO

SURGERY: EXCISION DONE



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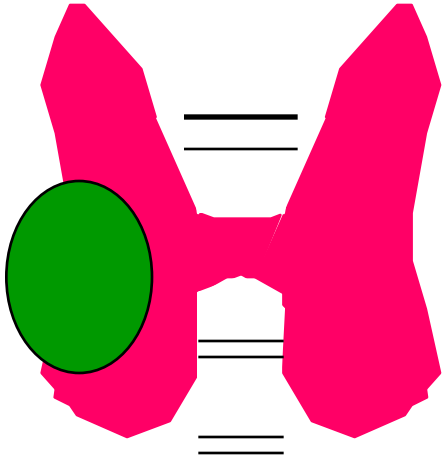
In a case of STN with FNAC reported as follicular neoplasm, what is the treatment plan?



A randomized controlled trial demonstrated a very limited role of frozen-section analysis for the vast majority of patients with follicular neoplasms.

Thus, the recommended approach in this group of patients is to perform excision of the thyroid lobe, harboring the nodule, and then waiting for definitive pathologic analyses on paraffin-embedded histology. If the lesion turns out to be a follicular carcinoma with characteristics that place a patient at high risk, such as significant capsular invasion or angioinvasion, a completion total or near total thyroidectomy is performed during a second operation to remove the contralateral thyroid lobe.

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PTC – extent of thyroid surgery ?

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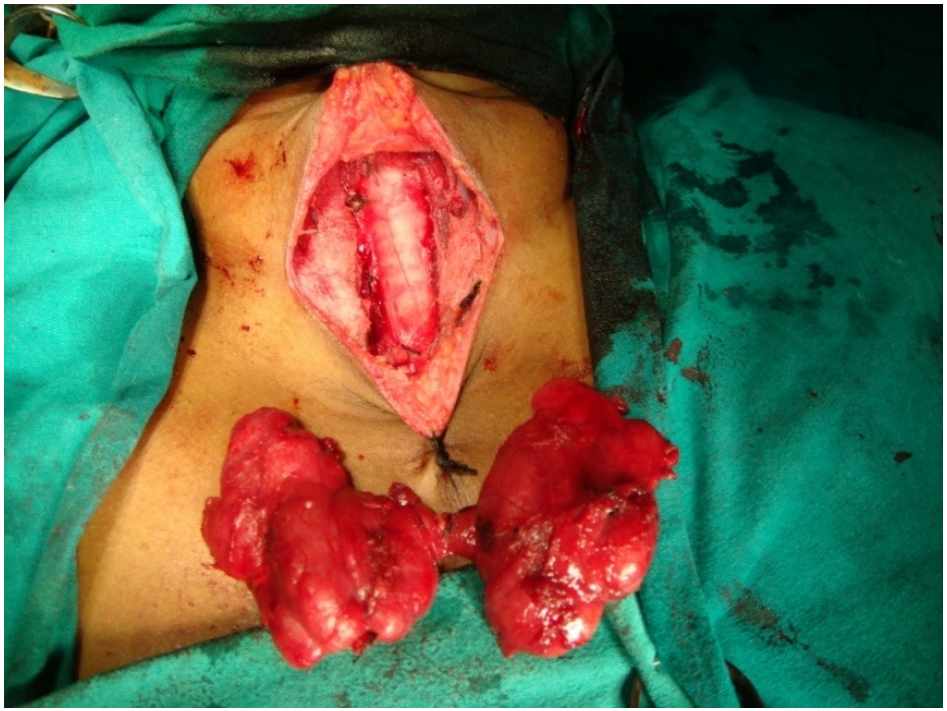
Recent American Thyroid Association Guidelines

Arguments for Total Thyroidectomy in Well-Differentiated Thyroid Carcinoma



Higher Survival Rate for Lesions > 1.5 cm in Diameter

- Lowest recurrence rate in all patients
- Prevention of recurrence in the contralateral lobe
- Reduces the risk of developing pulmonary metastasis
- Can be performed with the same morbidity and mortality as thyroid lobectomy

Extent of nodal dissection in thyroid cancers With

N 0
N1a (level VI nodes enlarged)
N1b (level I – V nodes enlarged)

- For N1a
  - Central neck dissection is enough
- For N1b
  - MRND type III

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What is the difference between the extent of nodal dissection done for thyroid malignancy and that for oral cavity malignancy?

SURGICAL ANATOMY OF NECK NODES

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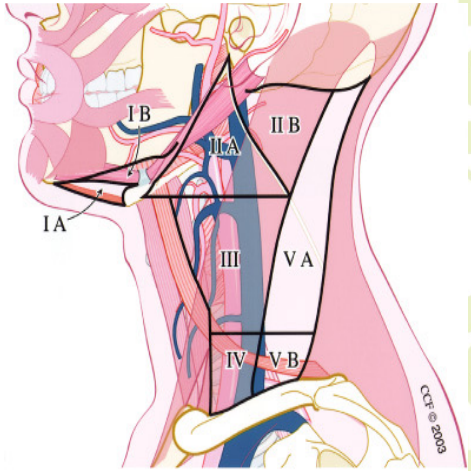
Level I A submental
Level I B submandibular
Level II upper deep cervical
Level III middle cervical
Level IV lower deep
Level V posterior triangle
Level VI central neck



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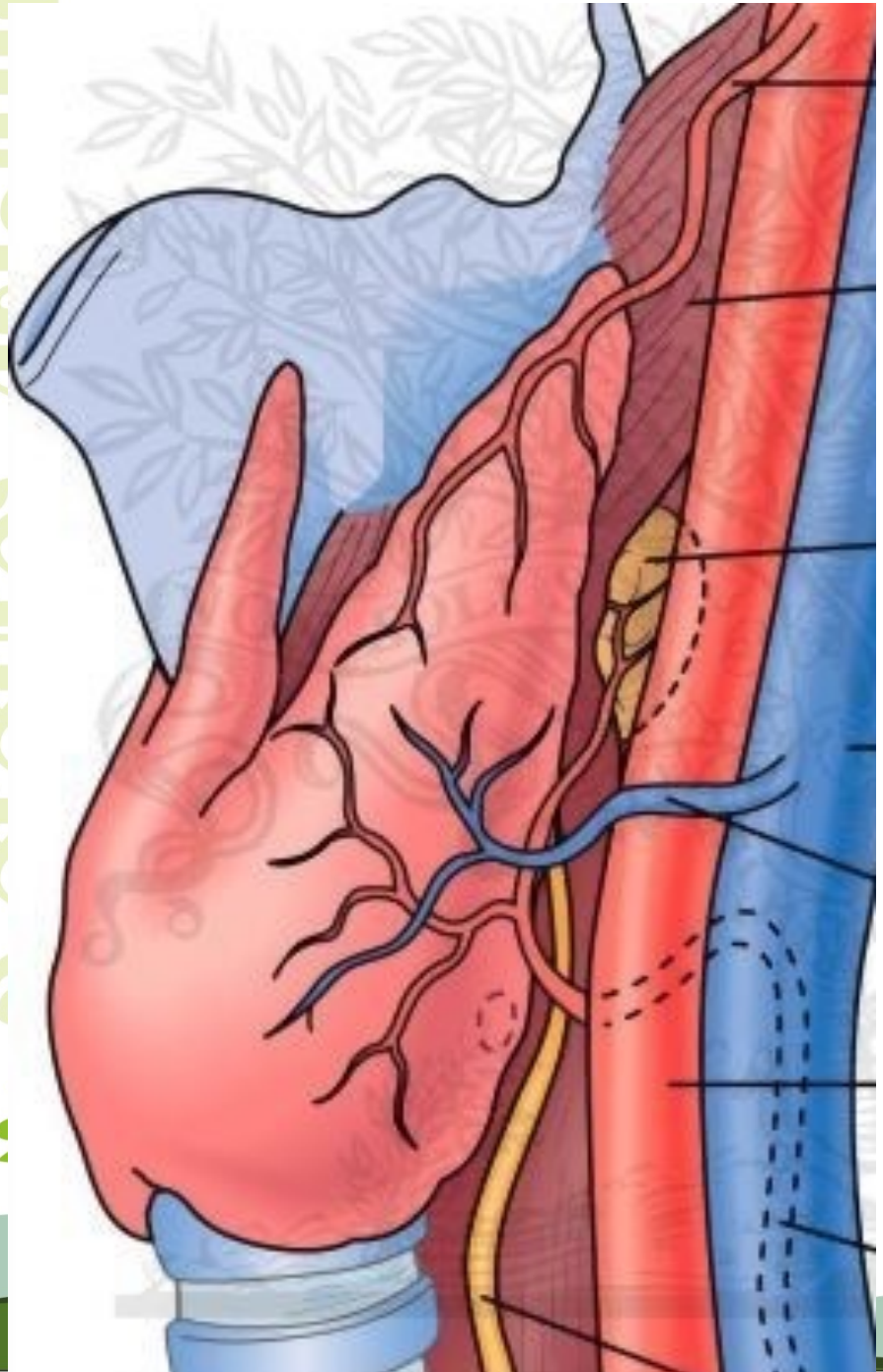
Usually MRND III (FND) - dissecting out level II to V nodes
Level I is non regional node for thyroid

But in cases were lymphatic pathway is altered by previous neck surgeries or when there is extra thyroidal invasion by tumor (T4), level I nodes need to be dissected

where to ligate the inferior thyroid A?



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- Old concept of ligating inferior thyroid A away from the gland to avoid injury to RLN, will leave the parathyroid devascluarised.

- Hence individual branches of ITA supplying the thyroid gland should be ligated close to the gland preserving the branches to parathyroid

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Adjuvant treatment protocol for well differentiated thyroid cancers?

Indications for adjuvant RAI ablation:

i. All FTC

ii. PTC with

size > 4cm

node positive patients

Role of adjuvant RT

all T 4 lesions

There is no role for chemotherapy in adjuvant setting

What is the recommended suppressive dose of Eltroxin for well differentiated thyroid cancers ?

No uniform fixed dose for all patients

Aim is to suppress the TSH level <0.1mU/L

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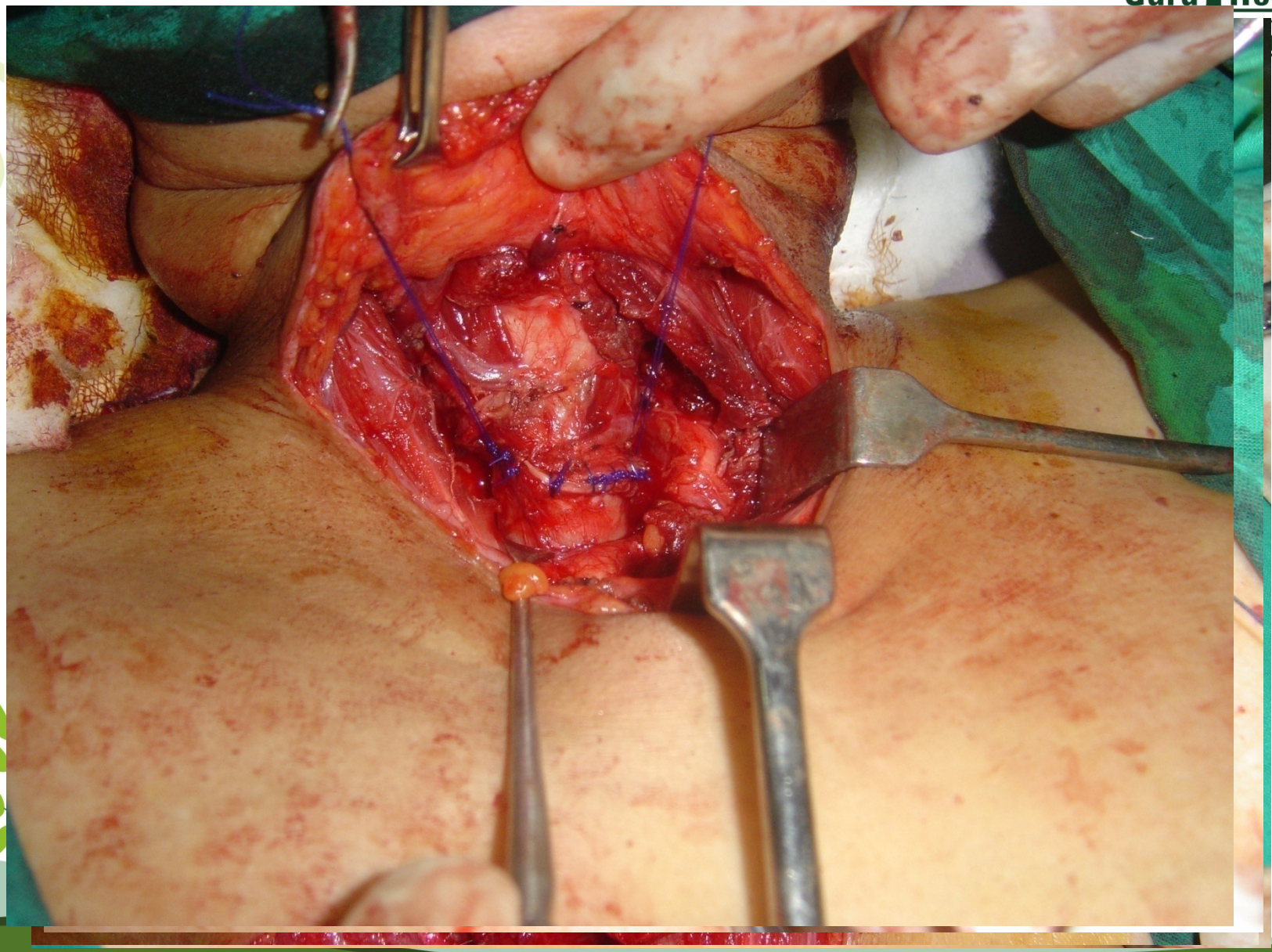
How to manage tracheal invasion?

1. single point tethering – perichondrial shaving

2. infiltration <5mm – remove the disc of infiltrated cartilage and convert it into a temporary tracheostomy

3. infiltration upto 2cm or < 4 tracheal rings – tracheal resection and end to and anastamosis after supra hyoid release



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Comprise 1% of all malignancies

Age is incorporated in thyroid staging

The most common presentation is a painless neck mass

Arguments for total thyroidectomy in well-differentiated thyroid carcinoma

For n1a - central neck dissection is enough, for n1b - mrnd type iii

Individual branches of ita supplying the thyroid gland should be ligated close to the gland preserving the branches to parathyroid

THANK YOU..