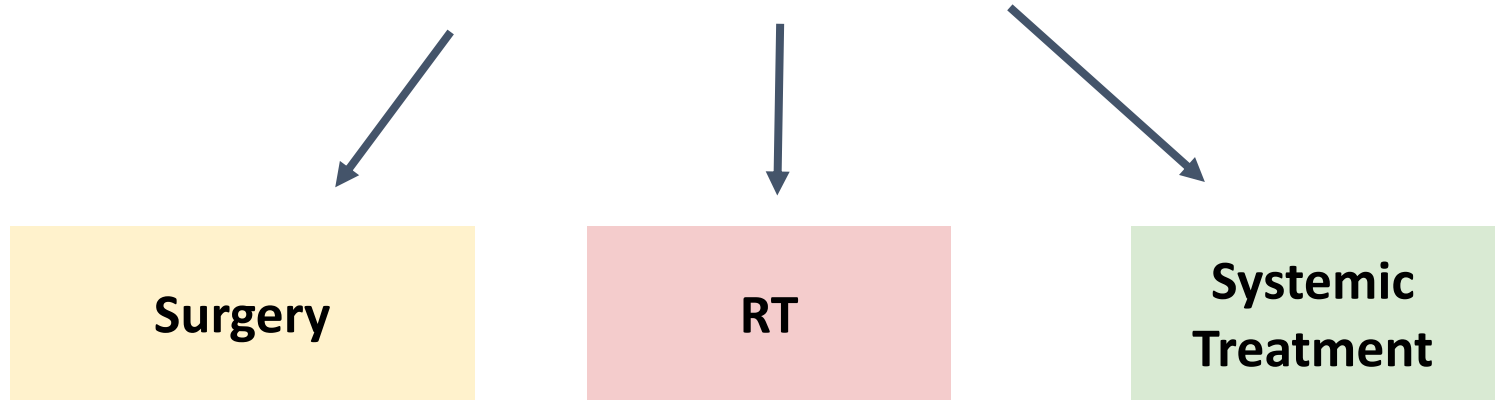


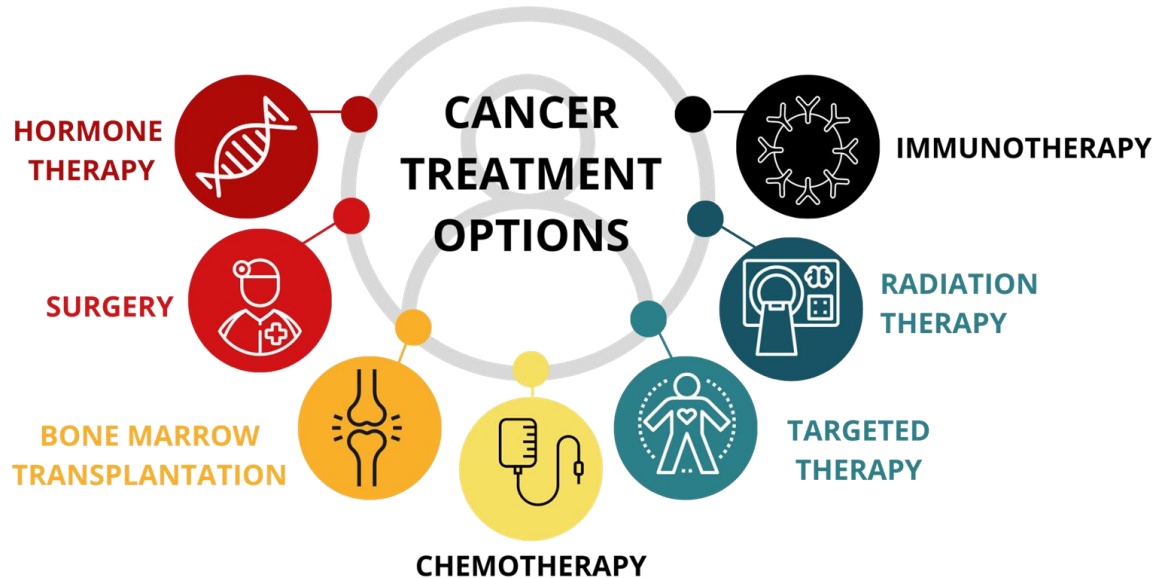
# LUNG , THYROID, PROSTATE & CANCERS

# Cancer Treatment



# Multi-disciplinary approach

Every new diagnosis of cancer should be discussed at a multidisciplinary team meeting comprising surgeons, oncologists, radiologists and pathologists



# Lung Cancer

# RISK FACTORS

- Cigarette smoking
- Occupational
  - Asbestose
  - Uranium miners
- Smoke from cooking & heating
- Air pollution & diesel exhaust
- Radiotherapy
- Lung fibrosis
- COPD

# PRESENTATION

- Cough
- Hemoptysis
- Chest pain
- Dyspnea
- Hoarseness
- Pleural effusion
- SVC obstruction
- Metastatic symptoms

# Management

- Surgery, Radiotherapy, Chemotherapy – single or a combination of options
- Small cell lung carcinoma – Always poor prognosis

# Thyroid Cancer

# HOW BIG IS THE BURDEN

- Slow growing cancers
- 10 year survival rate is over 95%
- Treatment modalities are widely available
- Very low mortality ( anaplastic <5%)
- Over diagnosis & over treatment is common
- Therefore guidelines do not recommend routine population screening

# Risk factors

- Radiation exposure
- Family history
  - family history of Cowden syndrome/ FAP/ MEN 2

# Clinical features of a suspicious nodule

- Recent rapid enlargement of a nodule
- Voice change
- Associated cervical lymphadenopathy

But most malignant thyroid nodules do not show these features in early stages

# WORK UP

1. Imaging: basic USS
2. Pathology
3. Thyroid status : All patients need TSH levels

Thyroglobulin has no place in initial diagnosis

# MANAGEMENT OF THYROID CANCER

- Mainstay of management is surgery
- Suppressive dose thyroxine should be started after surgery for differentiated thyroid ca to prevent recurrences

# Prostate Cancer

# RISK FACTORS

- Age
- Ethnicity
- Family history
- Alcohol
- Smoking
- Obesity
- Physical Activity
- Prostatitis

# PRESENTATION

- Majority asymptomatic
- At the time of diagnosis only 6% will have metastatic disease
- Symptoms are highly non specific
- LUTS/ hematuria/ hematospermia
- Bone pain/ pathological #/ urinary incontinence/ erectile dysfunction/ weakness can come with metastatic disease
- Slow growing with 5 year survival >95%

# Digital Rectal Examination

- Prostate cancer might be felt as an irregular hard nodule on DRE
- May be multifocal as well
- Normal DRE doesn't rule out ca prostate
- Therefore DRE is not recommended as a screening adjunct

# PROSTATE SPECIFIC ANTIGEN

- Highly non specific ; can have altered values in many non malignant conditions
- No single threshold to define abnormal PSA value
- Age specific reference ranges or  $>0.75\text{ng/ml}$  increase of PSA over an year
- 5 alpha reductase inhibitors/ NSAIDS/ statins/ thiazides can give lower PSA values. Therefore further evaluation of PSA of patients on these drugs should have a lower threshold.
- Non malignant conditions - BPH/ prostatitis/ UTI/ perineal trauma/ sexual activities

# Prostate Cancer

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graph TD; PC[Prostate Cancer] --> LR[Low Risk]; PC --> IFR[Intermediate - Favourable Risk]; PC --> IUR[Intermediate - Unfavourable Risk]; PC --> HR[High Risk]; LR --> AS_LR[Active Surveillance<br/>Other: Brachytherapy]; AS_LR --> EBRT_LR[EBRT<br/>Surgery]; IFR --> AS_IFR[Active Surveillance<br/>Other: Brachytherapy]; AS_IFR --> EBRT_IFR[EBRT<br/>Surgery]; IUR --> ADT_EBRT_Surg_IUR[ADT + EBRT<br/>Surgery]; HR --> ADT_EBRT_Surg_HR[ADT + EBRT<br/>Surgery];
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**Low Risk**

***Active Surveillance***  
*Other:*  
*Brachytherapy*

*EBRT*  
*Surgery*

**Intermediate  
- Favourable  
Risk**

***Active Surveillance***  
*Other:*  
*Brachytherapy*

*EBRT*  
*Surgery*

**Intermediate -  
Unfavourable  
Risk**

***ADT + EBRT***  
***Surgery***

**High Risk**

***ADT + EBRT***  
***Surgery***

THANK YOU