

















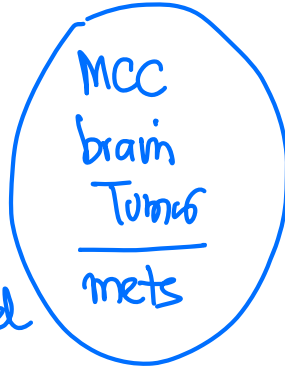
ONCOLOGY PART-2

 All Cancers <i>Lavender</i>	 Liver Cancer <i>Emerald Green</i>
 Anal Cancer <i>Green/Purple</i>	 Lung Cancer <i>White</i>
 Appendix Cancer <i>Amber</i>	 Lymphoma <i>Lime</i>
 Bladder Cancer <i>Marigold/Blue/Purple</i>	 Melanoma <i>Black</i>
 Brain Cancer <i>Grey</i>	 Metastatic Breast Cancer <i>Teal/Green/Pink</i>
 Breast Cancer <i>Pink</i>	 Multiple Myeloma <i>Burgundy</i>
 Cervical Cancer <i>Teal/White</i>	 Neuroendocrine Cancer <i>Zebra Stripe</i>
 Childhood Cancer <i>Gold</i>	 Ovarian Cancer <i>Teal</i>

Metastasis PET/CT ← 18 FDG

fluoro-deoxy
glucose

spread
Brain, ♀, liver

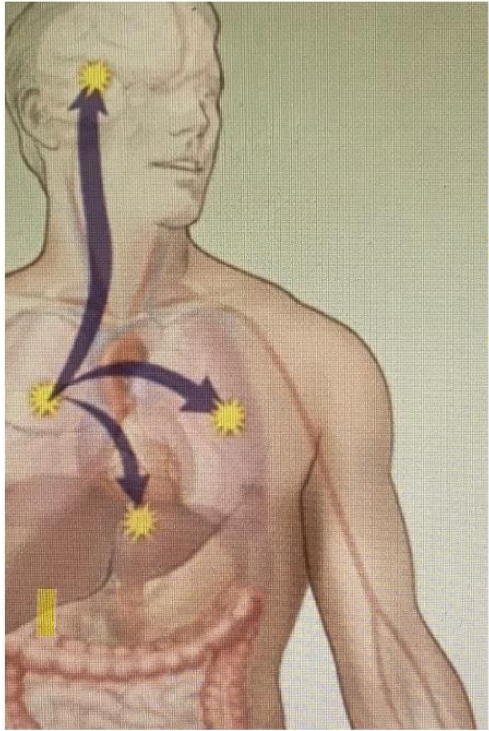


Lumbo-sacral
Spine: # Vx
pathological

lumbosacral spine

SEROUS CYSTADENO-
carcinoma
Adenocarcinoma lung

Oat cell lung



Carcinoma
Lungs
(oat cell)

Prostate
(Bateson plenus)

Breast

Malignant Ascites
Malignant pleural effusion
Malignant pericardial effusion



Cancer pain

1. Vertebra fracture
2. Nerve compression
3. Inflammation
4. Necrosis

OSTEOBLASTIC / OSTEOLYTIC SECONDARIES
RADICULAR PAIN

Likert Scale

WONG BAKER PAIN Rating scale



FENTANYL BUPRENORPHINE
Transdermal patch

pain + : R. alkalosis
CO₂ ↓
Tetany.

~ 3g/day

(Spasm)

1. Oral PCM + Dextropropoxyphene / codeine / methadone / hydromorphone
2. TCA; Amitriptyline / nortriptyline (depression)
3. Gabapentin | PREGABALIN
4. CANNABIDIOLS: CANNABIS
5. Non pharma interventions like TEN (Transcutaneous electrical nerve stimulation)

NEVER UNDERMEDICATE A CLIENT WITH CANCER

* excess Pain : R. alkalosis: (carpo-pedal) spasm | cramps

Types of surgeries in malignancy

Tumor	Surgical approach
Ca breast → neoadjuvant chemo →	Modified Radical mastectomy + axillary dissection
Ca ovary → DEBULKING Sx	
Familial adenomatous polyposis > 100 POUYPS / colon →	prophylactic COLECTOMY
Prostrate cancer →	Radical prostatectomy (P + seminal vesicles)
Lung cancer SCLC → CHEMOTHERAPY NSCLC → LOBECTOMY CISPLATIN + IRINOTECAN	

Side effects of chemotherapy

superficial thrombophlebitis +++

1. Fatigue
2. Vomiting
3. Hair loss
4. Mucositis
5. Skin changes
6. Myelosuppression
7. Peripheral neuropathy
8. Cardiomyopathy

⊕ C.T.2 alopecia [EMESET : ONDANSETRON]

→ diarrhea

TIC ↓

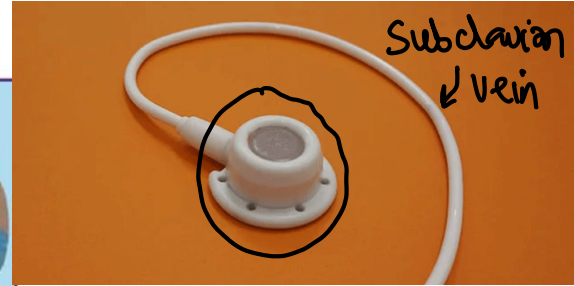
← VINCRISTINE

CHEMOPORT: delivery of chemo

Subclavian
↓ vein

When to inform PHCP

- Intractable diarrhea
- UTI/ Hematuria
- Fever > 24 hours



* Bleomycin = pulm FIBROSIS

* Adriamycin / doxorubicin = cardiotoxicity

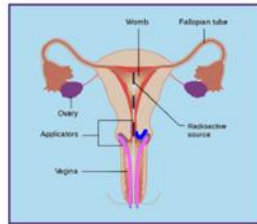
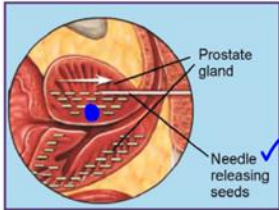
Radiotherapy

External Beam Radiotherapy: Teletherapy

Internal beam radiotherapy: Brachytherapy

Brachytherapy is used in

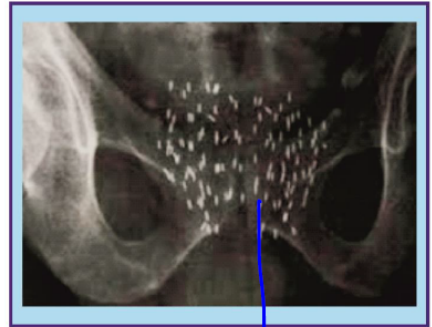
1. Carcinoma **CERVIX** : 60-60
2. Carcinoma **PROSTATE** : 1-125



Types of Brachytherapy



- 1 * Interstitial: Radioactive source put in Tumor
eg. ^{125}I PROSTATE: ^{125}I
- 2 * Intracavitary: Radioactive source put into space
near tumor location. eg. ^{60}Co CERVIX: ^{60}Co
- 3 * Systemic radiation therapy: Radioactive Iodine



^{131}I oral
* Radium-223: Bony metastasis

XRay
pelvis

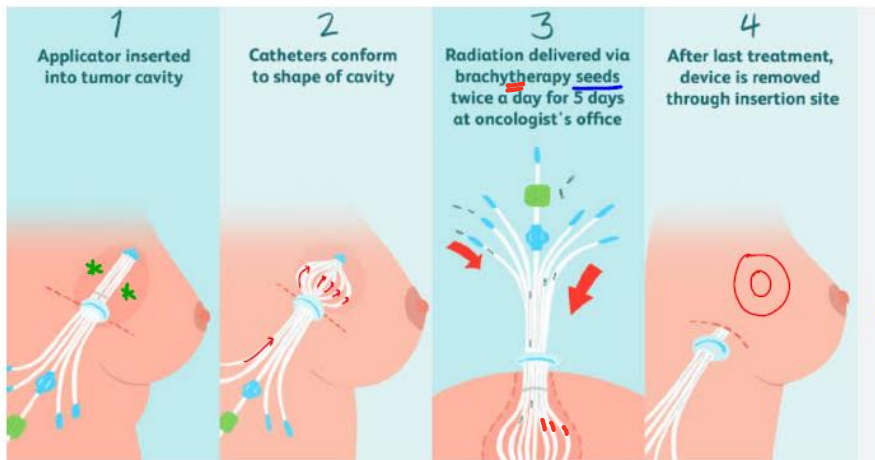
Radio isotopes used
Iridium - 192
 $t_{1/2}$ 74 days
↓
* Head & neck cancer

grave $T_4 \uparrow T_3 \uparrow$

 ^{131}I : β rays: $t_{1/2}$ 8 days



SAVI : Strut adjusted
volume implant
↓
Support that
stabilises a structure



Ga

Common side effects of RT

Overall (MC) \Rightarrow Radiation dermatitis

1. Fatigue
2. Alopecia
3. Altered taste sensation: DYSGEUSIA
4. Early menopause
5. Bladder & bowel problems \leftarrow FISTULA
6. Changes in vagina
7. Swelling legs : lymphedema
8. pain, neuralgia

Q

RT: Head & neck
TUMOR

S/E: XEROSTOMIA

↓
Dosimeter



Lead apron



RADIATION

Care of client with sealed RT implant

1. Private room with separate Bathroom
2. Radiation precaution mark outside the room
3. Organize nursing tasks
4. Limit 30/min care per shift ✓
5. Always wear dosimeter
6. Pregnant nurse not allowed ✗
7. Visitors less than 30 min/day at distance of 6 feet
8. Bed linen preserved till until source is removed

Management of sealed implant that dislodges

1. Ask patient to lie still
2. Use long handle forceps
3. Deposit in lead container ✓
4. Contact radiation oncologist
5. Document occurrence and actions taken

