Carcinoma Anal Canal

* Account for <5% of all anorectal malignancies
* Variety of Epith. → Variety of Ca
* ♂ Homosexuals → ↑ incidence
* AIDS- Kaposi's Sarcoma of anal canal
* Tumors arising above & below dentate line behave differently

  WHO < Anal Canal / Anal Margin

Neoplasms of Anal Margins

1. **Paget's Disease** → uncommon
   → From intraepidermal apocrine glands
   → Premalignant → Adeno Ca
   → Assoc. Development of visceral Ca

Features
* itching
* Erythematous, scaly, plaque like lesion
* Mostly Elderly pt.
* ♀ > ♂
* Δosed by Bx (Paget cells)

℞ → Wide Local Excision
→ Invasive Lesion → APR

Follow Up :- For development of Ca Rectum & Breast.

Bowen's Disease

* Rare
* slow growing
* intraepidermal Sq. Cell Ca (Ca-in-situ)
* 6th-7th decade
* Younger pt. – associated ⊂ condylomas

Features

* Dull Brown lesion
* Plaque like
* May be non-pigmented
* ulceration – s/o invasion (10% of untreated)
* Δosis by Bx – Bowenoid cells in Sq. cell ca
* ↑ed incidence of visceral disease

Rx :– → Wide Local Excision – SSG
→ Long term FU for Visceral Ca & Recurrence

Basal Cell Ca

* ulcerated nodule ⊂ pearly irregular elevated margins
* No metastasis
* Local Excision is sufficient
* Must be diff. from basaloid Ca of anal canal – Highly Malignant

Sq. Cell Ca

* ulcerated, rolled, everted margins
* below dentate line > in ♂
  Above " > in ♀
* well diff. keratinizing lesions

* Locally invasive
* Late Metastasis — to ing. L. Nodes (40%)

Rx
→ Localized Lesion - Wide Excision ± part of sphincter
→ Deep infiltration — APR
→ Chemoradiation
→ Groin dissection for L-Node metastasis

Prognosis ± out ing. L. Node — 2/3rd pt. survive >5yr.
± " + sphincter — 5yrs. survival < 5%.

Neoplasms of Anal Canal

1. Adenoca
   - From Rectum
   - From Anal ducts
   - Rarely in tract of Ch. Fistula

Rx :- APR
Radiation

II Melanoma
* 3rd Most common site (Skin/eyes)
* Bleeding, Pain, Irritation
* Usually Nonpigmented
* Bx
* Extremely Malignant
* Submucosal & Lymphatic spread
* Resistant to Chemo/Radiation
* APR - only Hope
* Poor Prognosis

III Squamous Cell Ca

* From Zone of transition
* Basaloid Ca
  Mucin Secreting
  > Variants.

Clinical Features :- Same

Bx for confirmation

Metastasis to Sup. Rec. Nodes in 1/2rd pt.
Ing. L. Nodes 1/3rd pt.

* Contiguous invasion
* Distant

Rx :- Surgery – APR
– Prophylactic Groin Dissection

1973 → Chemo Radiation (Nigro)

3000 Rads (30 Gy) 1–21 days
200 rads (2 Gy) / Day

5 FU – infusion 1st 4 Days
Mitomycin C – Bolus I/V Day 1
5FU → Day 28–31
Rpt

Simultaneous 4–6 wks

↓

APR if residual tumor

→ only for Lesions > 5cm
→ Bx Proven Residual tumor after chemo radiation

Carcinoma Rectum

* 4th Common Ca in ♀ & 3rd in ♂
  2nd Most common in Western countries
* Beleived to start in a adenoma → Genetic changes
  ↓
  Severe dysplasia
  ↓
  Ca

Pathology :-

a. Well Differentiated Adenoca
b. Averagely " "
c. Anaplastic or Highly undiff. adenoca

Can be ⟷ Ulcerated
Papilliferous
Infilterating

Spread

a) Local - * circumferential
* Usually 6 month period required to involve 1/4th of area & 18-24 M for complete circumference
* Annular variety common a RS jn.

Rectum Ca → Muscularis invasion → Mesorectum
↓
Perirectal Fascia (usually takes 18 M)

Ant. → ♂ Prostate, Seminal vesicles, Bladder
♀ Vagina uterus

Lat. Ureters

Post: Sactum & Sacral Plexus

Lymphatic Spread

L. Nodes may be enlarged because of Bact. Infection

* Above Peritoneal Reflection → Upward Spread (Exclusive)
* Below Peritoneal Ref upto 1-2cm of Anal Orifice → Upward but Ist station Paraarectal L. Nodes of Gerota

Dowward Spread Exceptional — L. Nodes of Groin

For total clearance at highest level — Ligation of Inf. Mesenteric A & V at origin

Hematogenous Spread

* Late usually.
* Early in young pt.

Liver 34%.
Lungs 22%.
Adrenal 11%.

Rest to other sites

Peritoneal :- Spread to local

Stages — Three Stages (Dukes)

A. Upto Rectal wall (15 pts.) — Good Prognosis

B. Upto Paraarectal Tissues
No L. Nodes (Regional) → 35% — Reasonable

C. Spread to Regional L. Nodes → 50% → Poor
C_1 - Only regional paraarectal L. Nodes
C_2 - Nodes accompanying B. vessels upto point of Division
Does not take into consideration of L. Nodes beyond this or venous spread

Histological Grade

Low Grade — Well Diff. — 11%. — Good Prognosis
Average Grade — 64%. — Fair
High Grade (Anaplastic) — 25%. — Poor

12% Cases - Colloid Ca - Lot of Mucin - Highly malignant

Clinical Features

Most common Age Group 5-6 decade
Uncommon in Young - but very aggresive

* Bleeding → Earliest & most common
  May co exist ∈ Haemorrhoides
  P/R Must

* Sense of Incomplete defaecation
  - Tenesmus - Painful straining to evacuate bowel ∈out evacuation
  → Very Important early symptom mostly in tumors of lower half of rectum
  → Spurious Diarrhoea
  → Blood stained mucus ('Bloody slime')

* Alteration in Bowel Habits
  → Tendency to use aperient → diarrhoea ↑
  → Early morning bloody diarrhoea (Ca Ampulla of Rectum)
  → ↑ing constipation esp. in RS growths

* Pain
  * Late symptom
  * May be because of SAIO
  * Severe pain ∈ prostate invasion
  * Back Pain ∈ invasion of sacral plexus

* Wt. loss – Suggestive of metastasis esp. Hepatic

Examination

* Abdomen
* P/R 90% cases growth can be felt
* P/V in ♀ pt to asses invasion
* Proctoscopy

Investigations

* Biopsy through procto or sigmoidoscope
* Ba Enema } To R/o Synchronous Ca
* Colonoscopy }
* USG < Abd / Rectal
* CT Scan
* IVP

D/D :-
→ Adenoma
→ Inflammatory strictures
→ Amoebic Granuloma
→ Endometrioma
→ Carcinoid tumor
→ Solitary ulcer

Treatment — Surgical Resection → Best

→ Fitness of Pt.
→ Extent of Tumor & spread ← USG — Endoluminal
CT / MRI
CxR

AIM → Radical Excision ⊂ Mesorectum & L. Nodes

→ One or Two Liver Metastasis — no contraindication for radical excision

→ Even ⊂ distant Spread — Local Excision shald be contemplated to give relief to pt.

→ Locally advance Ca — PreopRT ← Resection possible
↓ Recurrence

→ Unfit Pt. — * Transanal Excision
* LASER
* Interstitial Radiation

→ If resectable aim should to restore GI cont.

Ant. Resection — Tumor of upper 2/3rd tumors
(2/3rd of cases) Minimum 2cm of Resection margin

→ APR for Lower 1/3 Ca or Anaplastic Ca

Preop Preparation

* Mechanical Cleaning ← Purgatives
Enemas
Whole Gut Irrigation
* Antibiotics ← Aerobic
Anaerobic
* Electrolytes Imbalance to be corrected
* Bd. Transfusion if needed
* Urinary catheter

1. Anterior Resection < Standard
Laparoscopic – Less curative

2. APR

3. Hartmann's Operation – old & feeble pt
(Perineal dissection avoided)

4. Palliative colostomy – Ac. Int. Obst.
Resection later

5. Pelvic exenteration

RT → MV Cobalt therapy or Neutron beam irradiation is effective for Adenoca

4000 – 5000 Gy < Pre Op – ↓ size of tumor
Post Op
→ Local recurrence ↓es
→ No change in long term survival

Intracavitary (Papillon) RT → palliative

Chemotherapy & Immunotherapy

5FU < Systemic
Portal vein to reduce metastasis

5FU + Leucovorin
5FU + Levamisole (nonsp. stimulator of immune response)
5FU + Folinic Acid – For 6 months ↓ recurrence

Monoclonal Antibodies to CEA

Results of Surgery.

Resectability 95%. in specialized centres
& < 5% mortality

5 yr Survival 25 – 50%.

Local Recurrence – major problem
< 5% c TME
80% develop in 2 yrs
RT is the only answer

Carcinoid Tumor

Between Benign tumor & Ca
→ originates in submucosa (mucus membrane remains intact)
(As Elevation)
→ 10% as metastasis (Late)
→ Slow growing
→ > 2cm size almost malignant

Q
→ Local Excision in sufficient
→ > 2·5 cm treat like Ca Rectum
→ Even c metastases resection prolongs life.

Post operative Care

Sitz bath
Stool softner
Antibiotics ±

Complications of Haemorrhoidectomy

Early → Pain
→ Ac retention of urine
→ Reactionary Haemorrhage

Late → Secondary haemorrhage
→ Anal stricture
→ Anal Fissure

Rx of Complicated Haemorrhoides (strangulation, thrombosis gangrene)

Antibiotics
Sitz bath
Laxatives
↳ once settles then surgery

Severe Haemorrhage Requires immediate intervention

External Haemorrhoides Clinical entities are

(a) Thrombosed External Haemorrhoide (Perianal Haematoma)
Sudden onset, painful
pain et subside in 5 days
Can be excised under LA

(b) Internoexternal

(c) Dilatation of veins of anal verge

(d) Sentinel pile

(e) Genital warts