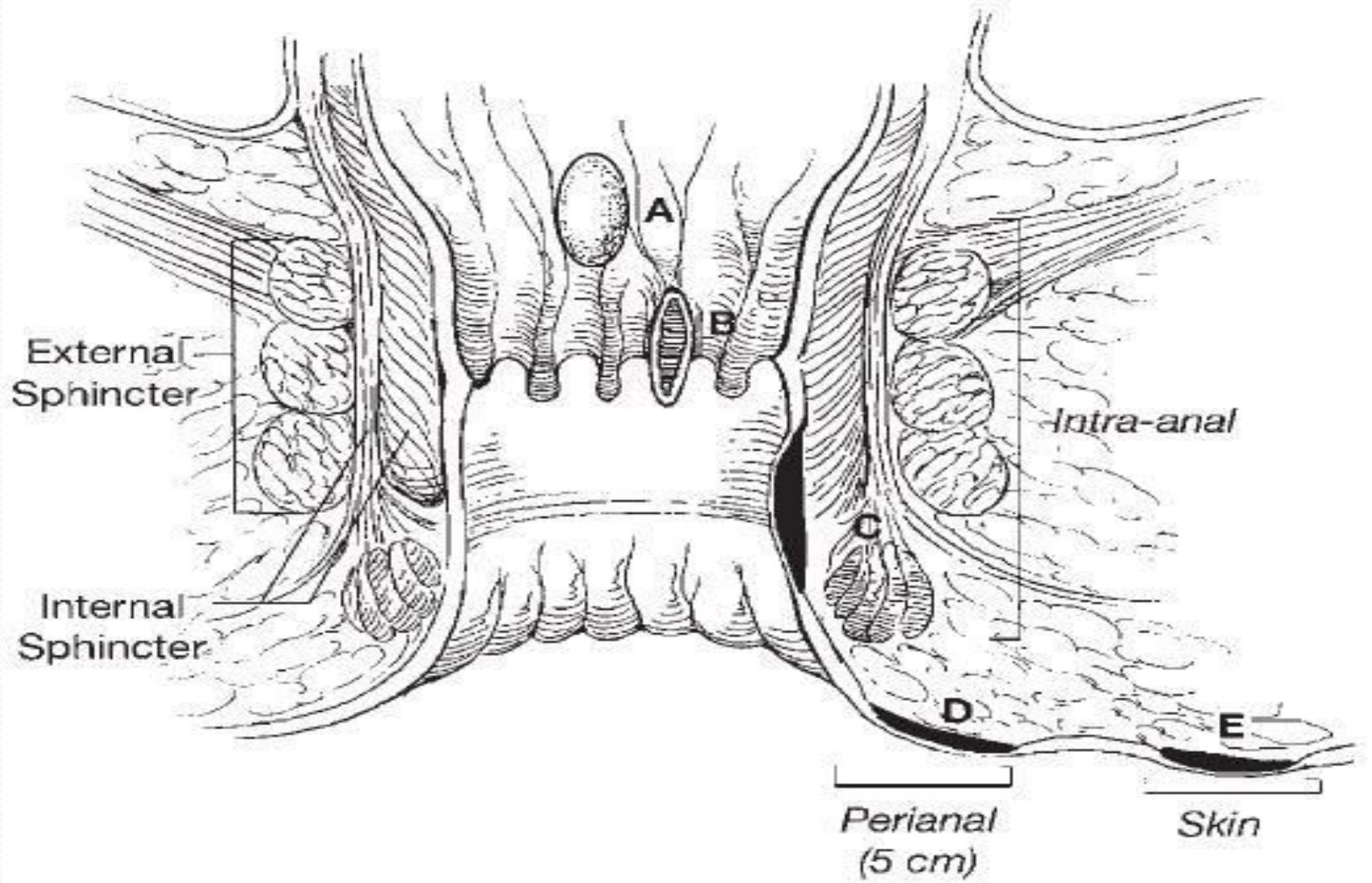
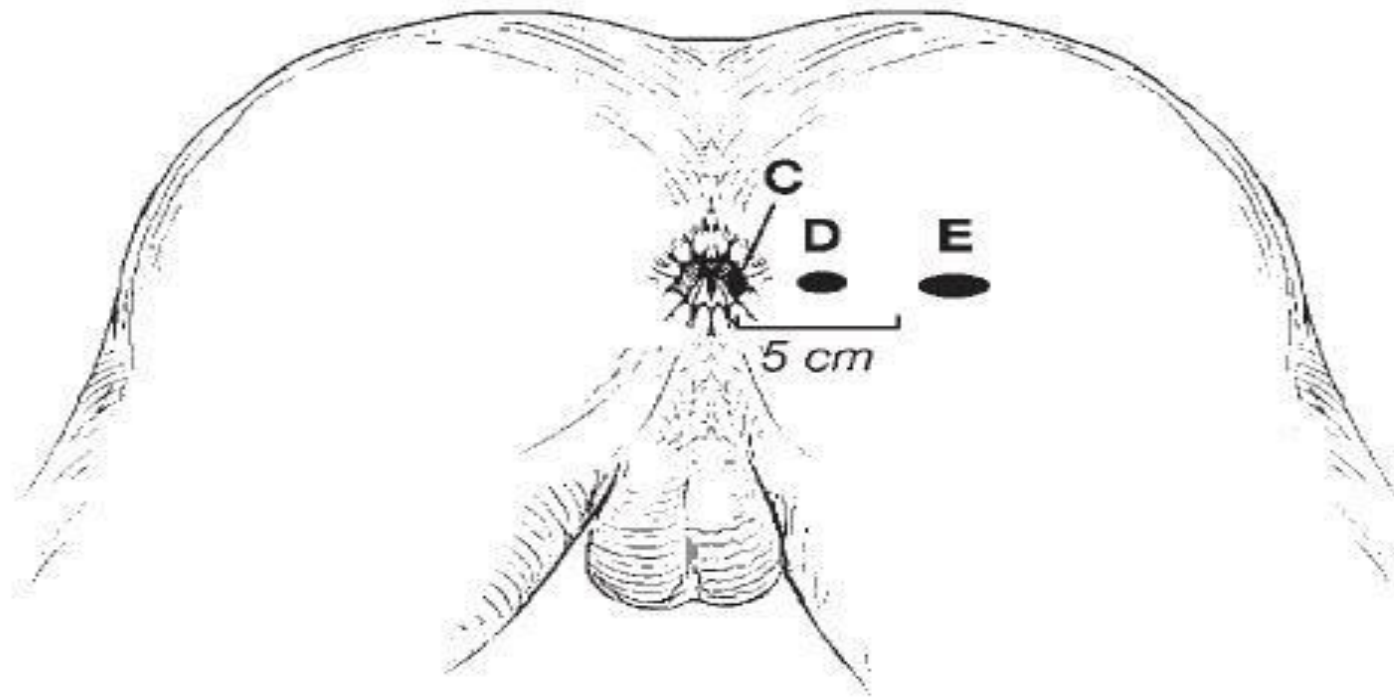


Anal canal malignancy

Dr.srimannarayana



a



b

FIGURE 35-1. Classification system of anal cancers: a) coronal section. b) perianal view; A-C. intranal (anal canal) lesions, D. perianal (anal margin) lesions, E. skin lesions.



classification

- Epidermoid carcinoma
- Transitional cloacogenic carcinoma
- Adenocarcinoma
- Malignant melanoma.

- Transitional cloacogenic carcinoma is the manifestation of squamous cell carcinoma, it form a spectrum that ranges from pure transitional cloacogenic tumours through lesions with mixture of squamous elements to those with purely SCC differentiation.
- With exception of melanoma clinical behavior of carcinoma of anal canal appears to be relatively independent of morphological behavior when compared to stage for stage and grade for grade

- Perianal squamous cancers tend to grow locally. They may extend into the anal canal.
- When there is doubt about the site of origin, it is conventional to classify the cancer as arising in the canal

- The most frequent tumor of the anal canal and perianal skin is squamous cell carcinoma (SCC).
- A major breakthrough has been the discovery of human papillomavirus (HPV) infection as a major etiology .
- The uncommon occurrence, and nonspecific clinical presentation of these lesions, often leads to misdiagnosis and a delay in appropriate treatment disease
- possible prevention through the use of novel vaccines.

Etiology

- Prior radiotherapy
- chronic anal fistula
- crohn's disease
- Smoking
- h/o cervical carcinoma
- HPV infection
- Hodgkin's disease
- renal transplantation
- HSV₂, HIV, male homosexuality, anoreceptive intercourse, anal condylomata, syphylis, immunosuppression

Clinical Characteristics:

- bleeding, which occurs in >50% of patients with many complaining of anal pain
- palpable lump,
- Pruritis
- discharge
- tenesmus
- change in bowel habits
- fecal incontinence
- inguinal lymphadenopathy.
- Unfortunately, most patients are diagnosed late, with up to 55% of patients being misdiagnosed at the time of presentation.

examination

- complete anorectal examination with external inspection of the anoderm, digital examination, anoscopy and proctoscopy, in addition to examination of inguinal areas.
- endoanal/endorectal ultrasound to assess the depth of the tumour, presence of perirectal lymphnodes, and invasion of adjacent organs.

- CT scan or magnetic resonance imaging (MRI) of the abdomen and pelvis can add to locoregional staging as well as evaluating for liver metastasis.
- A chest X-ray is used as a screening tool for lung lesions and, if suspicious, a chest CT should be performed.
- Positron emission tomography (PET) scans are primarily useful for assessing persistent or residual disease after treatment.
- Colonoscopy can exclude any associated lesions proximal to the anal canal.

Spread of anal cancer:

- local and regional.
- Anal canal cancer grows circumferentially and this feature results in narrowing and stenosis of the anal sphincter.
- When the sphincter is invaded, the tumor spreads into the ischiorectal fossae, the prostatic urethra and bladder in men, and the vagina in women.
- Anal cancer may spread via the lymphatic vessels (10-15 %) to the perirectal nodes or at a higher level, to nodes at the bifurcation of the superior rectal artery
- Liver metastasis is more common than lung or bone
- metastasis to distant organs like brain and iris are reported in literature.

- ***Surgery:***
- The treatment of anal canal SCC was historically operative with APR being the standard of care local recurrence rates ranged from 27% to 47% and 5-year survival was 40%-70%.

Local excision:

- who could not tolerate an abdominal operation,
- refused a permanent colostomy
- small, well-differentiated tumors
- For carcinoma confined to the mucosa and submucosa ,carcinoma insitu wide local excision with or with out anoplasty will usually be curative.

ABDOMINOPERINEAL RESECTION:

- who cannot tolerate radiation therapy or chemoradiation,
- who are incontinent because of irreversible damage of the sphincters or an anovaginal fistula,
- prior pelvic radiation treatment (most frequently for carcinoma of the cervix),
- Active inflammatory bowel disease affecting the rectum or anal region

chemoradiotherapy

- In 1974, Nigro and associates reported dramatic results in the treatment of epidermoid carcinoma of the anus by means of preoperative radiation therapy and chemotherapy.
- Its remarkable success in the management even locally extensive tumors or in the individuals with regional node metastasis has revolutionized the approach to the management of this condition.

- preoperative radiation (total of 30 Gy) to the tumour and to the pelvis and inguinal nodal area in 15 treatment sessions over a 3 week period (2 Gy per day, 5 days a week)
- the first day that radiotherapy is commenced, the patient is administered 5 FU in 5% glucose, 1000mg/m² /day, for 4 days as continuous 24 hrs infusion, and again from day 29 through 32.
- mitomycin C, 15 Mg/m², as a single bolus on first day.
- Side effects: mild degree of thrombocytopenia and leukopenia. low grade stomatitis and moderate diarrhea

- Variations:
- 3 dimensional ,endosonographic based radiation target simulation method ,using an after loading needle application .The anal caner is re staged following external beam radiation with 45 Gy.
- The memorial sloan kattering group suggested that in patients who are selected to undergo an initial excision biopsy followed combine modality therapy,30 Gy may be adequate radiation dose.

Prognostic Factors

- The anatomic extent of an anal cancer
- Extrapelvic metastases
- In the absence of regional node or distant metastases, the size of the primary tumor is the most useful predictor of local control, preservation of anorectal function, and survival.
- Spread to regional lymph nodes
- Women
- Hemoglobin levels 10 g/L or less
- In HIV-positive patients, high viral load, low lymphocyte CD4+ counts, and AIDS have been prognostic of poor local tumor control and survival.

POST THERAPY EVALUATION AND TREATMENT

- Biopsy or local excision of the scar site may be performed 6 weeks after the completion of the regimen.
- if no tumours is found the patient is observed for regular interval of every 2-3 months.
- Any suspicious is subsequently examined by biopsy..

- It is generally agreed that early intervention for persistent disease and recurrent locoregional disease can lead to successful salvage therapy.
- Routine examination with digital rectal examination and proctoscopy every 2 months in the first year, every 3 months in the second year, and every 6 months thereafter has been recommended

Treatment of Residual or Recurrent Disease

- Persistent or recurrent disease localized to the pelvis after chemoradiation can be treated with salvage therapy.
- Patients need to be restaged with a CT of the chest, abdomen, and pelvis
- MRI may be useful to assess resectability of pelvic recurrence and PET scan may help to differentiate tumor from radiation-induced tissue changes or other undetectable metastases.
- The benefit of adjuvant chemotherapy after APR is currently unknown.

- APR can be performed for tumor localized to the pelvis with a 5-year survival of 24%–47%.
- Those with positive margins, nodal disease at salvage, and persistent disease after chemoradiation have poorer outcomes
- Morbidity for APR in this setting is significant with an increased risk of perineal wound complications.
- This has prompted the use of plastic surgery reconstruction using rotational or advancement flaps to promote healing.

● THANK YOU