Invasive Cervical Cancer

Done by :
Tasneem Alzaghal

* 3rd most common gynecologic cancer diagnosis & cause of death
* in developed countries, the incidence & mortality decrease due to Presence of → ① screening programs ② HPV vaccine (before 1st intercorse)
* Age distribution → variable

---

* Risk Factors :- ① early onset of sexual activity ② multible sexual partners
  ③ a high risk sexual partner (partner with multible sexual partners or known HPV infection)
  ④ history of STDs ⑤ Immunosuppression
  ⑥ history of vulvar or vaginal squamous intraepithelial neoplasia
  ⑦ early age at first birth & increasing parity ⑧ non white women
  ⑨ Low socioeconomic status ⑩ OCP (indirect)
  - cervical cancer is Less common in sexual partners of circumcised males
  - Smoking is Not associated - Genetic is unconfirmed

---

* Pathogenesis :- 70% HPV 16 & 18
* Histopathology :- ① Squamous cell carcinoma (69%) (most common)
  ② Adenocarcinoma (25%) (2nd most common)
  ③ other (6%)

---

* Pattern of Spread :- ① Direct extension → uterus, vagina, bladder, rectum
  ② Lymphatic → pelvic (external iliac, obturator), para-aortic
  ③ Hematogenous → Lung, Liver, bone

---

* Clinical Presentation :-
  ① early stage is Asymptomatic diagnosed by screening or incidentally
  ② Irregular or heavy vaginal bleeding
  ③ Post coital bleeding
  ④ vaginal discharge
  advanced disease : ⑤ Pelvic or lower back pain
  ⑥ Bowel or Urinary symptoms

* Diagnosis :-

① Physical examination
② Cervical cytology
③ Cervical biopsy & colposcopy

* Staging :- (clinical staging)

- procedure → ① Physical examination ② Pelvic examination ③ examination for distant metastases ④ Cervical biopsy ⑤ Colposcopy with direct cervical biopsy ⑥ endocervical curettage ⑦ conization ⑧ endoscopy ⑨ hysteroscopy ⑩ cystoscopy ⑪ proctoscopy ⑫ imaging studies ⑬ Intravenous pyelogram (IVP)

- FIGO system →

Early :-

stage 1 tumor reach cervix only

- stage 1A1 → (very small diagnosed by biopsy, young age, seeking for pregnency) → Conization

stage 2A tumor reach Uterus without parametrial invasion

- Surgery
- if tumor ⩾4 cm → Radiotherapy

Advanced :-

stage 2B tumor with parametrial invasion (uterusacral & cardinal ligament)

- in bimanual examination ⇝ parametrial are fixed
- should start with Radiotherapy then surgery

stage 3 tumor reach Pelvic wall, Lower 1/3 of vagina, causes hydronephrosis

stage 4 Metastasis (bladder, rectum, exteneds beyond true pelvis)

- Chemo-radiotherapy then surgery

Surgery →

Radical Hysterectomy → uterus + cervix + parametrium

Modified Radical Hysterectomy → uterus + cervix + parametrium (from half not from origin)

* Recurrence :-

① central (56%)

② pelvic sidewall (37%)

③ distant metastasis (60%) → Lung , bone, paraortic nodes

---

* Post-Treatment Surveillance :-

- follow up → Speculum every 3 months
  CT, MRI, PET every 6-12 months
- if recurrence → change the modality of treatment

اذا قبل تعالجت بـ surgery تعطيها radiotherapy & chemotherapy

اذا قبل تعالجت بـ radiotherapy & chemotherapy تعالجها بـ surgery أو another type

---

* Survival Rate :-

- Stage is the most important prognostic factor
- followed by Nodal status
- 5 years survival with early stages
- women with involved Pelvic or Para-aortic nodes are poor prognosis

---