Screening for cervical cancer

Dr.A.Moridi
Gyneco-oncologist
SBMU

Role of screening

- Recommendations for screening, as well as specific screening strategies, balance the benefits from early detection of treatable lesions and reduction in incidence and mortality of cervical cancer with **potential risks for false positives**, **unnecessary procedures**, and **other harms**.

notice

- HPV can be transmitted in skin-to-skin genital touching, which patients may not consider as sexual activity.

Case 1

- A28years old virgin woman with vaginal discharge and intermitant vaginal bleeding.
- Past history of skin sexual cantact, smoking
- DDx: SCC

Benefits of screening

- Screening can detect precursors and early-stage disease for both types of cervical cancer: squamous cell carcinoma and adenocarcinoma
- reductions in cervical cancer mortality
- decreased incidence of cervical cancer

Potential harms of screening

- Patient discomfort and psychosocial consequences
- Rising health care costs
- False-positive results
- **Risks of treatment on pregnancy outcomes**

Case 2

- A23 yrs old nuligravid woman referred to consult about crayotherapy
- Past history: pap smear normal, hpv test: 51positive, repeat hpv test: same, colposcopy were done and biopsy were: koilositic change

Available methods for cervical cancer screening

- the Papanicolaou (Pap) test (ie, cytology),
- HPV testing, (ie, Cobas, BD Onclarity)
- co-testing (with both cytology and HPV)

Screening intervals

- **Pap testing alone:** the suggested screening interval for Pap testing alone is every three years.
- **Primary HPV testing:** the suggested screening interval for primary HPV testing is every five years.
- **Co-testing**: the suggested screening interval for co-testing is every five years.
- **Reflex HPV testing (also called triage HPV testing):** when pap test was ASCUS
- **Single lifetime screening** : WHO guidelines state that screening even once in a lifetime is beneficial

screening for cervical cancer in asymptomatic, immunocompetent patients

- **Age <21: no** screening for cervical cancer

- **Age 21 to 29:** BASED ON 2018 (USPSTF) guidelines cervical cytology every three years

BASED ON 2020 (ACS) guidelines, initiate screening at age 25 with primary HPV testing every five years.

screening for cervical cancer in asymptomatic, immunocompetent patients

- **Age 30 to 65:** any of the following strategies is acceptable:

●Primary HPV testing (with an FDA-approved test) every five years; or

●Co-testing (Pap and HPV testing) every five years; or

●Pap test alone every three years

2020 ACS recommendations

screening for cervical cancer in asymptomatic, immunocompetent patients

- **Age >65 years: If adequate prior and all normal screening**: **discontinuing** screening

- **<u>Adequate screening:</u>** Having no history of cervical intraepithelial neoplasia (CIN) grade 2+ for the past 25 years and one of the following screening strategy:

•Two consecutive negative primary HPV tests within the past 10 years, with the most recent test within the previous five years **or**

•Two consecutive negative co-tests (Pap and HPV testing) within the past 10 years, with the most recent test within the previous five years **or**

•Three consecutive negative Pap tests within the past 10 years, with the most recent test within the previous three years

screening for cervical cancer in asymptomatic, immunocompetent patients

- **Age >65 years: If inadequate prior screening or unknown screening:** co-testing annually for three years before spreading out the interval to every five years. Some clinicians continue screening such patients up to approximately age 80 years

SCREENING IN HIGHER RISK PATIENTS

- Patients with **HIV**, **immunosuppression** (eg, solid organ transplant, allogeneic hematopoietic stem cell transplant, systemic lupus erythematous, and those with inflammatory bowel disease or rheumatologic disease requiring **current** immunosuppressive treatments), and in utero exposure to diethylstilbestrol (DES) are at an increased risk for developing cervical cancer

SCREENING IN HIGHER RISK PATIENTS

- For patients diagnosed with HIV prior to the age of 21 years: screening is initiated within one year of the onset of sexual activity.
- For patients <30 years, cervical cytology is used for screening.
- For patients ≥30 years, either cervical cytology or co-testing is acceptable for screening.
- perform a screening colposcopy at first visit.
- annual examination also includes a thorough visual inspection of the anus, vulva, and vagina.

Case 3

- A 42 yrs old woman, HIV POSITIVE, referred with pap smear: ASCUS, we done colposcopy
- DDx: CIN3

SCREENING IN HIGHER RISK PATIENTS

- If screening with **cervical cytology** : is performed every 12 months for a total of three years, If the results of three consecutive cervical cytology tests are normal, follow-up with cervical cytology is performed every three years.

SCREENING IN HIGHER RISK PATIENTS

- If screening with **co-testing** : Repeat co-testing is performed every three years

- Screening continues throughout a patient's lifetime (and does not end, as in the general population, at 65 years old).

Special situation

- **Subtotal hysterectomy (cervix intact)**
- **Recipients of HPV vaccine**

current standard cervical cancer screening recommended

Special situation

- **Symptomatic patients,** defined as:

Patients of any age, including age <21 years, who have signs or symptoms of cervical disease;

- abnormality on visualization or palpation of the cervix,
- abnormal or postmenopausal bleeding,
- abnormal discharge,
- pelvic pain, or
- change in bowel or bladder function

should undergo appropriate **diagnostic** evaluation regardless of prior screening history. This evaluation includes a diagnostic Pap test and evaluation for cervical biopsy.

Case 4

- A 18 yrs old woman, vaginal discharge, PCB, papsmear:ASCUS, PH.Exam: hypertrophy of cervix and seen one erosive polyploidy lesion
- DDx: CIN3

THE best protection is early detection