

# Vagina

In adult females, the vagina is seldom a site of primary disease. More often, it is involved secondarily by cancer or infections arising in adjacent organs (e.g., cervix, vulva, bladder, rectum).

<b>Squamous cell carcinoma of the vagina</b>
Extremely uncommon.
Women older than 60 years.
Risk factors similar to those associated with carcinoma of the cervix.

<b>Risk factors for cervical cancer</b>
<ul style="list-style-type: none"><li>• Infection with high-risk HPV strains (eg, 16, 18)</li><li>• History of sexually transmitted infections</li><li>• Early onset of sexual activity</li><li>• Multiple or high-risk sexual partners</li><li>• Immunosuppression</li><li>• Oral contraceptive pill use</li><li>• Low socioeconomic status</li><li>• Tobacco use</li></ul>
<b>HPV</b> = human papillomavirus.

Vaginal intraepithelial neoplasia (VAIN) is a precursor lesion-----nearly always associated with HPV infection----- HPV-positive VAIN----- Invasive squamous cell carcinoma of the vagina.
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<b>Clear cell adenocarcinoma of the vagina</b>
A very rare tumour. (SCC > AD)
In 1970----diethylstilbestrol (synthetic estrogen) during pregnancy (to prevent abortion). - Follow-up studies---- the incidence of this tumour in persons exposed to diethylstilbestrol in utero is low (<1 per 1000 absolute, albeit about 40 times greater than in the unexposed population).
DES causes persistence of Müllerian epithelium while inducing contact between epithelium and the vaginal mesenchyme.
So, Diethylstilbestrol exposure----vaginal adenosis (precursor lesion)---- clear cell adenocarcinoma in young women (DES daughters).
Unopposed estrogen and obesity cause an increase in the peripheral conversion of steroid hormones to estrone by the enzyme aromatase, leading to a hyperestrogenic environment.
Non-DES exposed patients may have a poorer prognosis compared with DES-exposed individuals. Due to older age.

Clear cell adenocarcinoma of the vagina

Bimodal age distribution: Mean age 22 years in women with exposure to DES and 55 years in postmenopausal women with no history of DES but may have a hx of a pelvic endometriosis (chronic inflammation and hormonal effect).

Sarcoma botryoides (embryonal rhabdomyosarcoma of the vagina)

Rare.
Embryonal rhabdomyosarcoma variant.
Affects females < 4 years old. Sarcomas more common in children than the carcinoma.
So, In infants and children younger than 5 years of age (<4) but may occur uncommonly in young women.
Translocated mutations on somatic chromosomes.
Spindle-shaped cells, (+) desmin.
Presents with clear, grapelike, polypoid mass emerging from vagina.
Soft polypoid masses/anterior vaginal wall.
It also may be found in other sites, such as the urinary bladder and bile ducts .