Female Genital System-I vulva and vagina

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VULVA

> The vulva is the external part of female genital system and includes the moist hairbearing skin and mucosa in that region.

>Vulva constitutes the portion of female genitalia that is external to the hymen

Vulva can be affected by many pathology like:

•inflammation.

Non-neoplastic epithelial disorders.

Neoplastic lesions.



Ц

which separates internal and external genetalia





| | I. VULVITIS |
|---------------------------|--|
| | Usually it represent a reactive inflammatory response secondary to: |
| | •exogenous stimulus: contact irritant dermatitis, contact allergic dermatitis. |
| caused by HPV (16, 18) | Infection: like sexually transmitted disease (STD): Caused by HPV (6, 11) Human papillomavirus (HPV): the causative agent of condyloma acuminatum an - intraepithelial neoplasia. Carcinogenic |
| | OHerpes simplex virus (HSV-1 or -2): Characterized by vesicular eruption. |
| | N. gonorrhoeae , a cause of suppurative infection of the vulvovaginal glands. |
| | Treponema pallidum, the syphilis pathogen. |
| | Candida. |

nd vulvar

II. NON-NEOPLASTIC EPITHELIAL DISORDERS





1-Lichen Sclerosus:

Clinically presented as white plaques (termed leukoplakia).

Lichen sclerosus commonly affects postmenopausal women.

لدمم وجدوا إنه when estrogen decreased alua become dry Valua become more atrophied

> The pathogenesis is uncertain, may related to autoimmune disorders (genetic predisposition).

> Lichen sclerosus is benign; however, a small percentage of women (1%) with symptomatic lichen sclerosus develop squamous cell carcinoma of the vulva.

SCC





1

Microscopic features

epidermal atrophy. Thin epidermis

hydropic degeneration of the basal cells.

progressive sclerosis / homogenization of papillary dermal collagen fibers





2-Lichen Simplex Chronicus

> Lichen simplex chronicus appears as white patches or plaques.

It represent a consequence of chronic irritation, often caused by pruritus related to an underlying inflammatory dermatosis.

> With isolated lesions, no increased predisposition to cancer has been found, but lichen simplex chronicus often is present at the margins of established vulvar cancer, raising the possibility of an association with neoplastic disease.

Microscopic features

> Epithelial thickening (acanthosis).

Hyperkeratosis. (Proliferation in stratum cornea)

Increased mitotic activity is seen in the basal and suprabasal layers; however, there is no epithelial atypia.



Psoriasiform hyperplasia مع الم من بت الم عنه الم الم



3. condyloma acuminatum

>Benign papillomatous squamous proliferation

with a fibrovascular core, caused by human papillomavirus (HPV) infection.

Caused by HPV serotypes 6 and 11.

Low risk and non malignant

>Clinically: usually asympote matic but it may cause discomfort, pruritis, bleeding, eczematous rash or Painless mass.

> They can occur anywhere on the anogenital surface, sometimes as single but more often as multiple lesions.





Miceoscopic features

Hyperplastic papillary squamous epithelium.



* هل لو شخت Koilocy tosis كالعريع لدزم أحكي لمرجى ؟؟

ب الجواب : لل ب ل we write in report: * Suspicious HPV related u:/a(changes and we need to do PCR test (HPV - وبعرين (۲۰۰۰ عاستشارين يحوا المان ها ح

Carcinoma of the Vulva

Represents about 3% of all female genital tract cancers, occurring mostly in women older than age 60.

>90% of carcinomas are squamous cell carcinomas; the other tumors are mainly adenocarcinomas or basal cell carcinomas.

two distinct forms of vulvar squamous cell carcinoma were found:



1. HPV-related vulvar SCC

Associated with high risk HPV subtypes 16 and 18.

>- occurs in middle-aged women, particularly cigarette smokers.

>- associated with vulvar intraepithelial neoplasia (VIN). Precursor lesion

>tend to be **poorly differentiated squamous cell carcinomas**



vulvar intraepithelial neoplasia (VIN).

Precursor lesion of HPV associated vulvar carcinoma

> Usually manifested as areas of leukoplakia in the form of whitish patches.

>Over time, these areas are transformed into overt exophytic or ulcerative endophytic tumors.

Environmental factors such as cigarette smoking and immunodeficiency appear to increase the risk of such progression.



Non invasive

2. Non-HPV related SCC:

>occurs in older women.

>not associated with HPV and preceded by years of reactive epithelial changes, principally lichen sclerosus.

>Not associated with *vulvar intraepithelial neoplasia* (VIN).

>typically manifest as well-differentiated keratinizing squamous cell carcinomas.





Invasive nests

بكون متعارف عليه في breast cancer بس بتتواجد أحيانًا بال vulva

Extramammary Paget Disease

intraepidermal proliferation of malignant epithelial cells that can occur in the skin of the vulva or nipple of the breast.

A majority of cases of vulvar (extramammary) Paget disease have no demonstrable underlying tumor.

Paget disease manifests as a red, scaly, crusted plaque that may mimic the appearance of an inflammatory dermatitis.



Microscopic:

- -Large epithelioid cells with abundant pale, finely granular cytoplasm and occasional cytoplasmic vacuoles infiltrate the epidermis.
- -The presence of mucin, as detected by periodic acid–Schiff (PAS) staining, is useful in distinguishing Paget disease from vulvar melanoma, which lacks mucin.



vagina

➢ Vagina is a fibromuscular tube that extends from the vestibule of vulva to uterine cervix.

The vagina is seldom a site of primary disease.
Primary disease

More often, it is involved secondarily by cancer or infections arising in adjacent organs (e.g., cervix, vulva, bladder, rectum).

Congenital anomalies of the vagina

Congenital anomalies of the vagina fortunately are uncommon and include entities such as:

total absence of the vagina.

م رجب بكون في غشاء فا uterus 11 Elfo

Septate or double vagina (usually associated with a septate cervix) cervix وهذا العشاء بوص and, sometimes, septate uterus).

> Interal Gartner duct cysts arising from persistent wolffian duct Remnant in the embryological life and if its not it will cause a benign condition rests.







VAGINITIS

Vaginitis is a relatively common condition that is usually transient and of no clinical consequence. It is associated with leukorrhea. Vaginal discharge

> May be caused by bacteria, fungi, and parasites. Many are normal commensals that become pathogenic only in the setting of diabetes, systemic antibiotic therapy, immunodeficiency, pregnancy.



Common vaginitis

Candidiasis:

is a fungal infection caused by Candida albicans :

Typical clinical features include vulvar and vaginal erythema, excoriations, thick white حڪة و تقسير adherent discharge, and swelling.

Trichomonas vaginalis: Motile pear shaped parasite

produces a watery, copious gray-green discharge

in which parasites can be identified by microscopy.







MALIGNANT NEOPLASMS

1. Squamous Cell Carcinoma

- Squamous cell carcinoma of the vagina is an extremely uncommon cancer that usually occurs in women older than 60 years of age.
- Vaginal intraepithelial neoplasia VAIN is a precursor lesion that is nearly always associated with HPV infection.







2. Clear Cell Adenocarcinoma

Nucleous and pale cytoplasm

>very rare tumor usually identified in a cluster of young women whose mothers took diethylstilbestrol DES during pregnancy to prevent threatened abortion. Now, Clear cell adenocarcinoma is very rare.





Gross features: clusters of edematous, grape-like masses that protrude into lumen of hollow organs.







>Microscopically:

>myxoid stroma containing spindle cells. Some of these cells contain a bright eosinophilic granular cytoplasm suggestive of rhabdomyoblastic differentiation.

> An important diagnostic feature is the crowding of the tumor cells around blood vessels and beneath the squamous epithelium (the "cambium layer").

