

# Diseases of the vulva

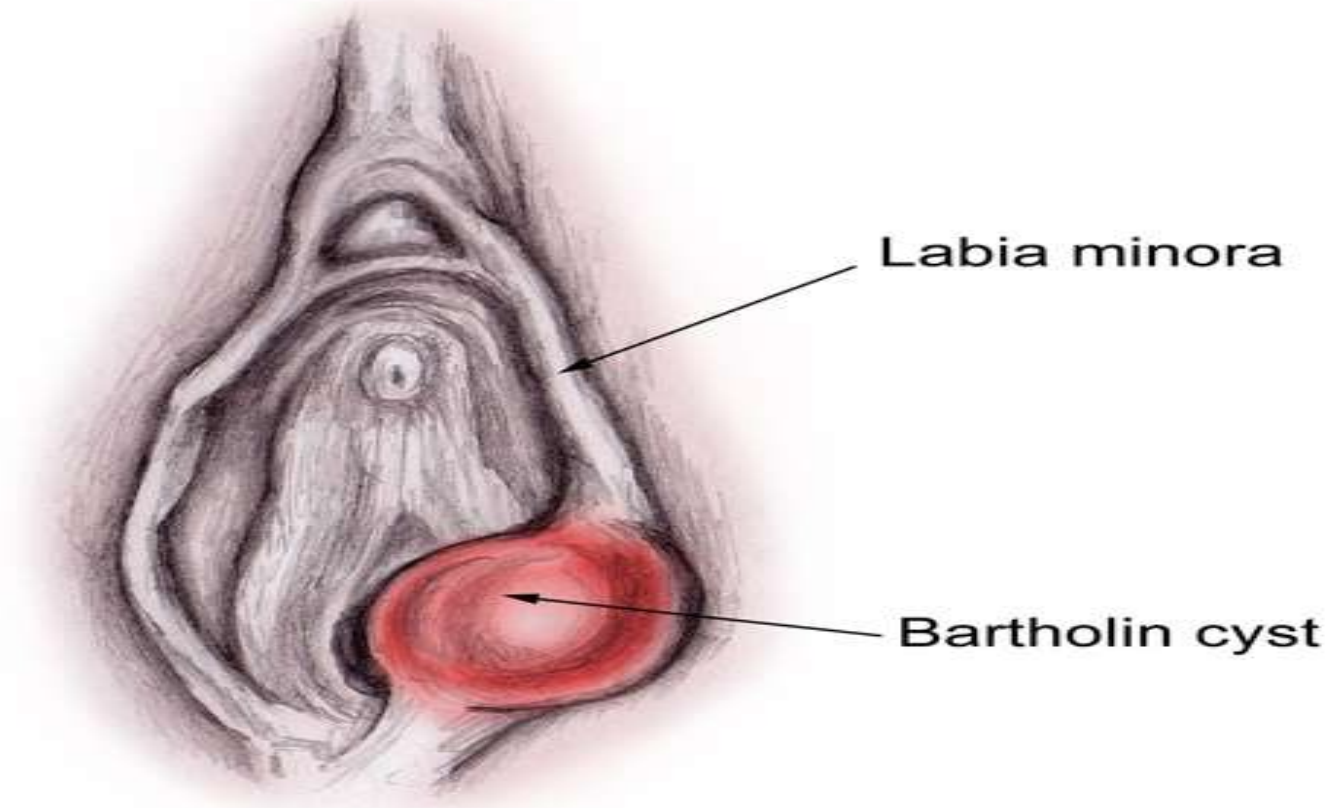
# 1. Bartholin Cyst

- Infection of the Bartholin gland produces an acute inflammation within the gland (adenitis) and may result in an abscess.

## Bartholin duct cysts

- Are relatively common, and result from obstruction of the duct by an inflammation
- The cyst is lined by metaplastic squamous epithelium.
- They produce pain and local discomfort

# Bartholin cyst



## **2.Non-Neoplastic Epithelial Disorders**

- Are heterogeneous group of lesions of the vulva presents as white, mucosal thickening
- May produce itching and scaling.
- Are of unknown etiology are classified into two categories which may coexist and often multiple, making their clinical management particularly difficult

## **(1) Lichen sclerosus**

- The lesions appear clinically as white lesions time may extend and coalesce, and when involve the entire vulva, the labia become atrophic and stiffened.
- Is most common in postmenopausal women
- It may also be encountered elsewhere on the skin

- The pathogenesis is uncertain. Increased frequency of autoimmune disorders in these women suggests an autoimmune reaction may be involved.
- Although the lesion is **not pre-malignant** by itself, women with symptomatic lichen sclerosus have a somewhat increased chance of developing squamous cell carcinoma in their lifetime.

## **2. Squamous Cell Hyperplasia**

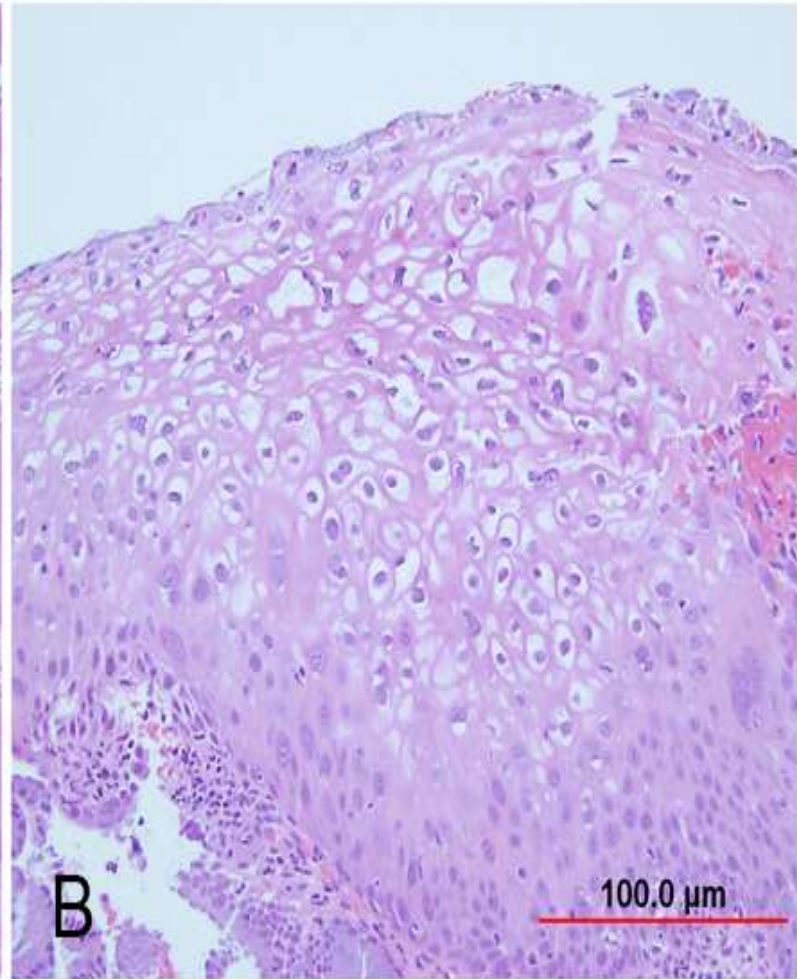
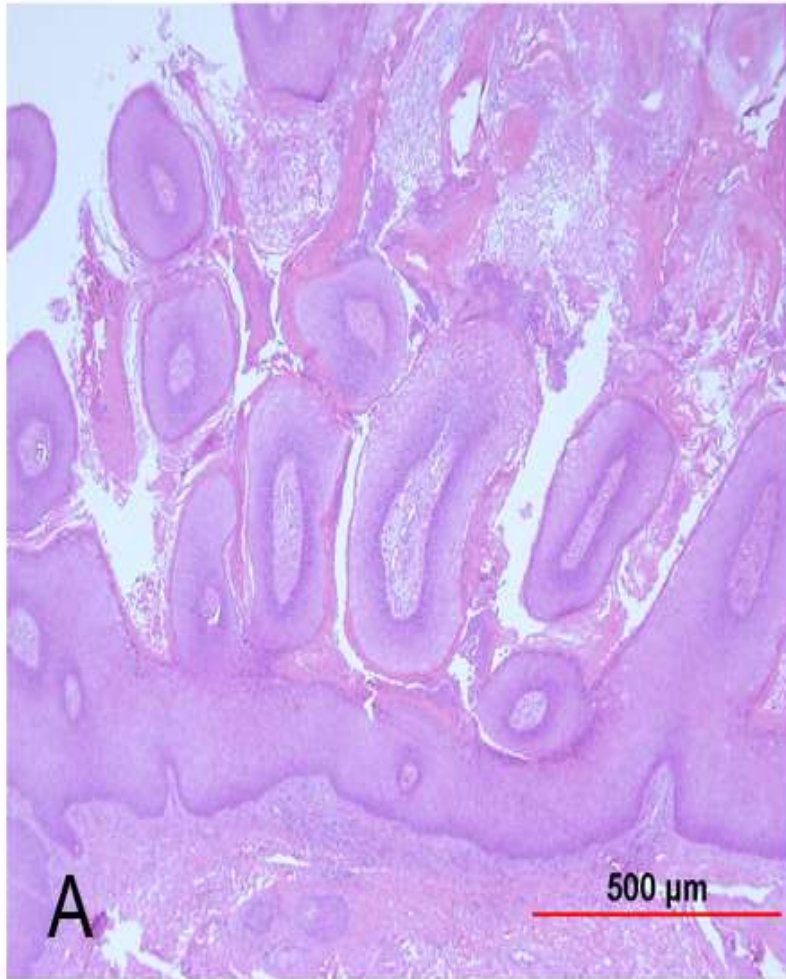
- Is a nonspecific condition resulting from rubbing or scratching of the skin to relieve pruritus.
- It is marked by
  - a. Epithelial thickening, with hypergranulosis
  - b. Significant surface hyperkeratosis
  - c. Leukocytic infiltration of the dermis
  - d. No atypia .

### 3. Condyloma acuminata

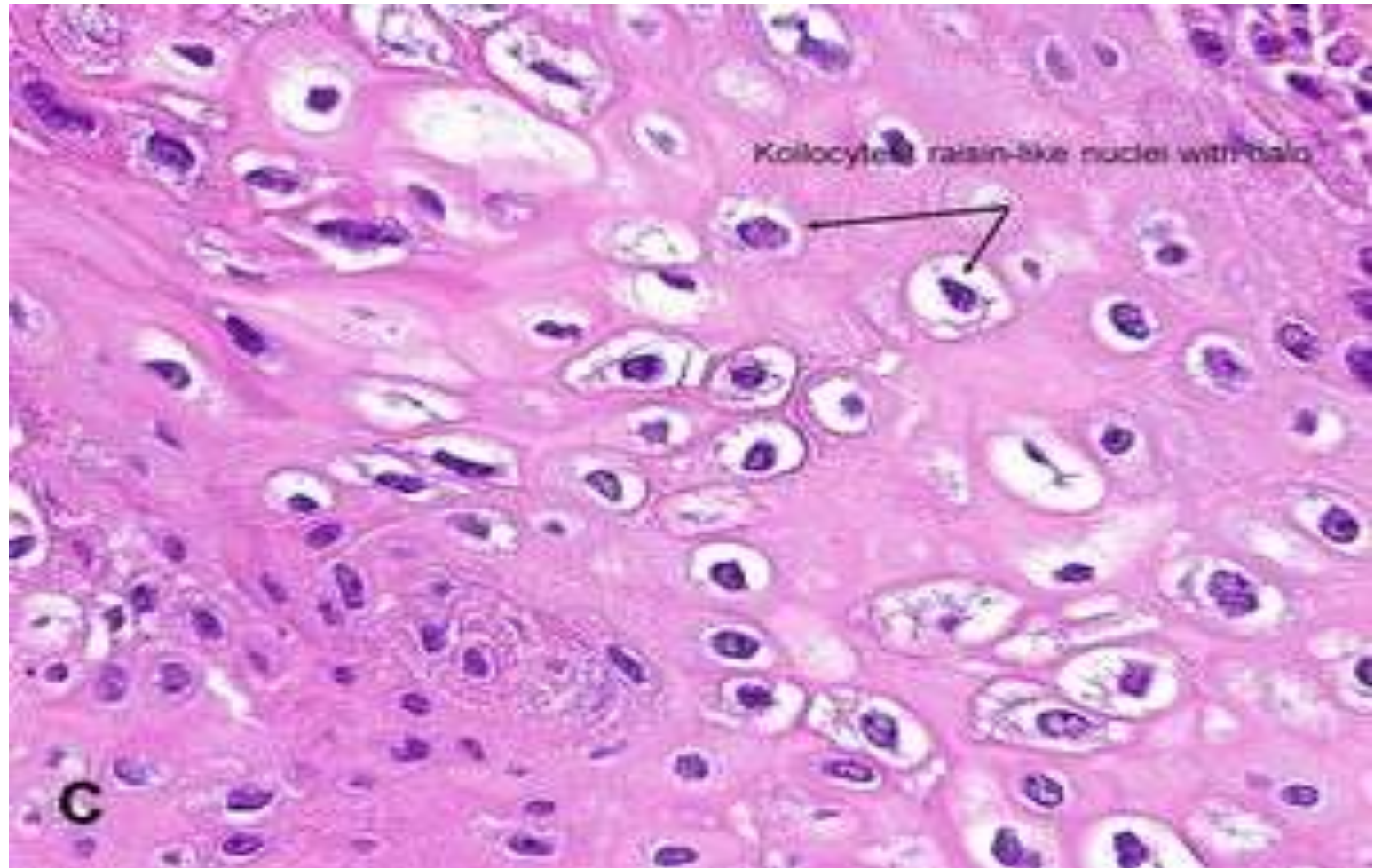
- A benign exophytic lesions
- Are sexually transmitted, benign lesions caused by low oncogenic risk HPVs, 6 and 11
- They are more frequently multifocal
- They may involve vulvar, perineal, and perianal regions , vagina and less commonly, the cervix
- Are not considered precancerous lesions



# Condyloma acuminatum



# Koilocytic atypia



## **4. Vulvar Intraepithelial Neoplasia and Vulvar Carcinoma**

- Carcinoma of the vulva is an uncommon malignant neoplasm represents about 3% of all genital cancers in the female;
- Approximately two thirds occur in women older than 60 years.
- Squamous cell carcinoma is the most common histologic type of vulvar cancer.

- Vulvar squamous cell carcinomas are divided into two groups:
  1. *Basaloid and warty carcinomas*
    - Accounts for 30% of cases of vulvar carcinomas
    - Related to infection with high oncogenic risk HPVs
    - Develop from a precancerous in situ lesion called *classic vulvar intraepithelial neoplasia* (classic VIN)

- It most commonly occurs in reproductive-age women, and the risk factors are :
  - a. Young age at first intercourse,
  - b. Multiple sexual partners
  - c. Male partner with multiple sexual partners

## **Vulvar intraepithelial neoplasia (VIN)**

1. Frequently multicentric in the vulva, a
2. 10% to 30% of patients with VIN also have vaginal or cervical HPV-related lesions
3. The majority of cases of classic VIN are positive for HPV 16, and less frequently for other high-risk HPV types, like HPV 18 or 31.

## Note:

- Spontaneous regression of VIN lesions has been reported, usually in younger women
- The risk of progression to invasive carcinoma is higher in women older than 45 years of age or in women with immunosuppression.

## **Gross of warty carcinoma of vulva**

- May be exophytic or indurated, with ulceration.

### **On histologic examination, are**

- a. An infiltrating tumors
- b. Composed of nests and cords of small, tightly packed malignant squamous cells lacking maturation and may show necrosis



## 2. Non-HPV-related *keratinizing squamous cell carcinomas*

- *Account for 70% of all cases of vulvar carcinomas*
- *Not related to HPV infection (70% of cases).*
- *Frequently arise in individuals with long-standing lichen sclerosus or squamous cell hyperplasia.*
- *The mean age of the patients is 76 years.*

- The immediate premalignant lesion is referred to as *differentiated vulvar intraepithelial neoplasia* (differentiated VIN) of unknown etiology
- It is postulated that chronic epithelial irritation in lichen sclerosus or squamous cell hyperplasia may contribute to a gradual evolution of the malignant phenotype.

## Gross

- May develop as nodules in an inflammatory background and may be misinterpreted as dermatitis for long periods .
- Micro: Keratinizing squamous cell carcinoma

## Note:

- The clinical manifestations are nonspecific, including local discomfort, itching, and the superficial secondary infection, may underscore the importance of repeated examination in women with vulvar inflammatory disorders.).

- Patients with lesions less than 2 cm in diameter have a 60% to 80% 5-year survival after treatment with vulvectomy and lymphadenectomy
- Large lesions with lymph node involvement have a 5-year survival rate of less than 10%.

## ***Verrucous carcinomas of vulva***

- Are fungating tumors resembling condyloma acuminatum,
- Not associated with papillomaviruses.
- Rarely metastasize
- Successfully cured by wide excision.

# Extramammary Paget Disease

- This is rare lesion of the vulva, and sometimes the perianal region and presents as a pruritic, red, sharply demarcated, area
- Most commonly affects the labia majora.

## Note;

- In contrast to Paget disease of the nipple, in which 100% of patients show an underlying ductal breast carcinoma, vulvar lesions are most frequently confined to the epidermis of the skin

- Paget disease is treated with wide local excision  
With high recurrence rate
- Typically, Paget cells spread beyond the confines of the grossly visible lesion, and therefore are frequently present beyond the margins of surgical excision .
- It may persist for many years, or decades, without invasion or metastases.
- Invasion develops rarely, and in such patients the prognosis is poor





# Diseases of Vagina

## **1. Vaginal adenosis**

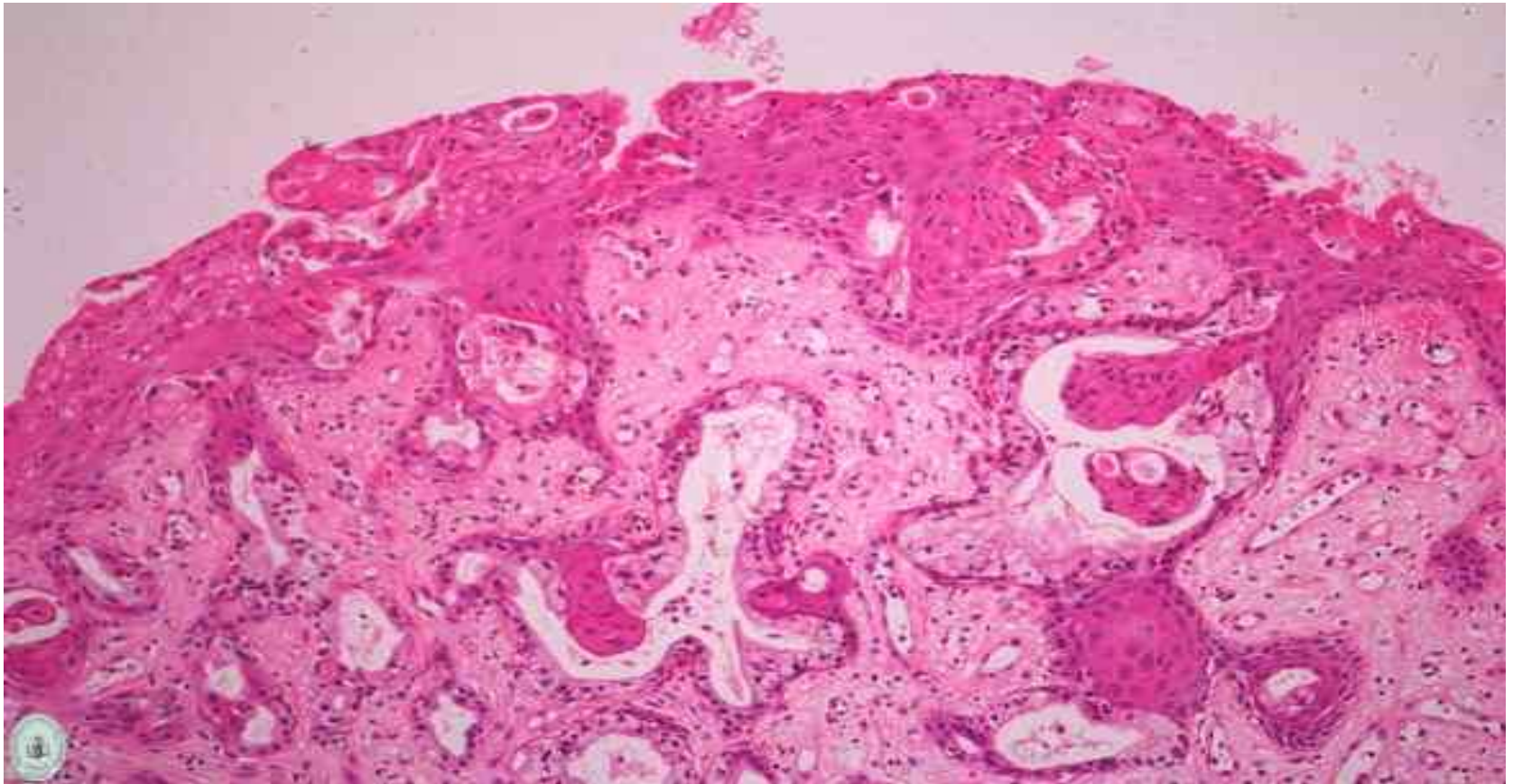
- Is a remnant of endocervical-type epithelium that during embryonal development extends from the endocervix and covers the ectocervix and upper vagina
- Adenosis, while normally present in a small percentage of adult women, has been reported in 35% to 90% of women exposed

to Diethylstilbestrol DES in utero

- Adenosis presents clinically as red, areas contrasting with the normal pale-pink vaginal mucosa
- On microscopic examination, it is composed of columnar mucinous epithelium

Note: Rare cases of clear cell carcinoma of vagina in DES-related adenosis were recorded in teens and young women in the 1970s and 1980s, resulting in discontinuation of DES treatment

# Vaginal adenosis



## **2. Gartner duct cysts of vagina**

- Are relatively common lesions found along the lateral walls of the vagina and derived from wolffian (mesonephric) duct rests.

## **3. Vaginal carcinoma**

- The most common malignant tumor of the vagina is carcinoma metastatic from the cervix,
- Followed by a primary squamous cell carcinoma of the vagina which are uncommon accounting for

about 1% of malignant neoplasms in the female genital tract.

- All of the tumors are squamous cell carcinomas associated with *high oncogenic risk HPVs*.

Note: The greatest risk factor is a previous carcinoma of the cervix or vulva and 1% to 2% of women with an invasive cervical carcinoma eventually develop a vaginal squamous cell carcinoma.

## .carcinoma

- Primary squamous cell carcinoma of the vagina arises from a premalignant lesion, *vaginal intraepithelial neoplasia* (VaIN)
- Most often the invasive tumor affects the upper posterior vagina.
- Primary carcinomas in the lower two thirds of the vagina metastasize to the inguinal nodes, whereas upper lesions tend to involve the regional iliac nodes.

# 5. Embryonal Rhabdomyosarcoma

- Called sarcoma botryoides of the vagina
- This uncommon vaginal tumor is
  - Most frequently found in infants and in children younger than 5 years of age
  - This tumor tend to invade locally
  - It causes death by penetration into the peritoneal cavity or by obstruction of the urinary tract.



- Conservative surgery, coupled with chemotherapy, seems to offer the best results in cases diagnosed sufficiently early
- **Gross appearance**
  1. These tumors tend to grow as polypoid, rounded, bulky masses that sometimes fill and project out of the vagina;
  2. They have the appearance and consistency of grapelike clusters

# Sarcoma botryodes



# Sarcoma Botryodes

