Case Presentation

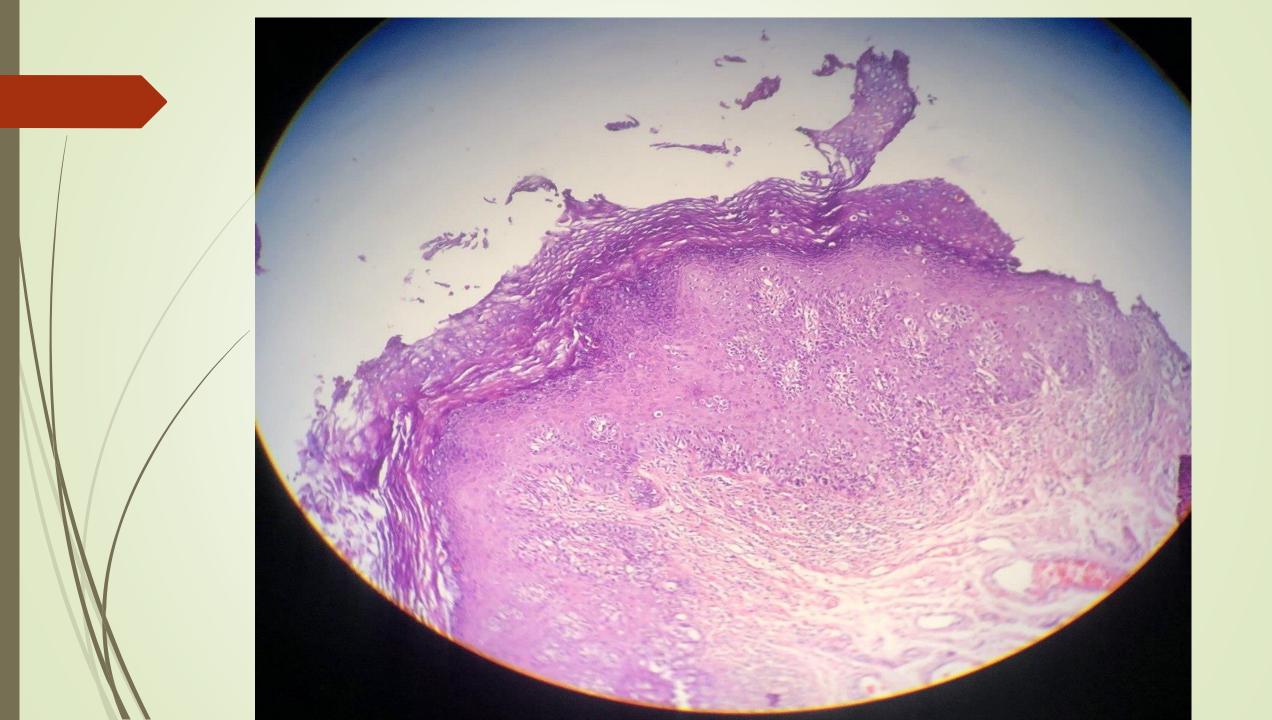
Presented by: Dr. Shekoofeh Enayati

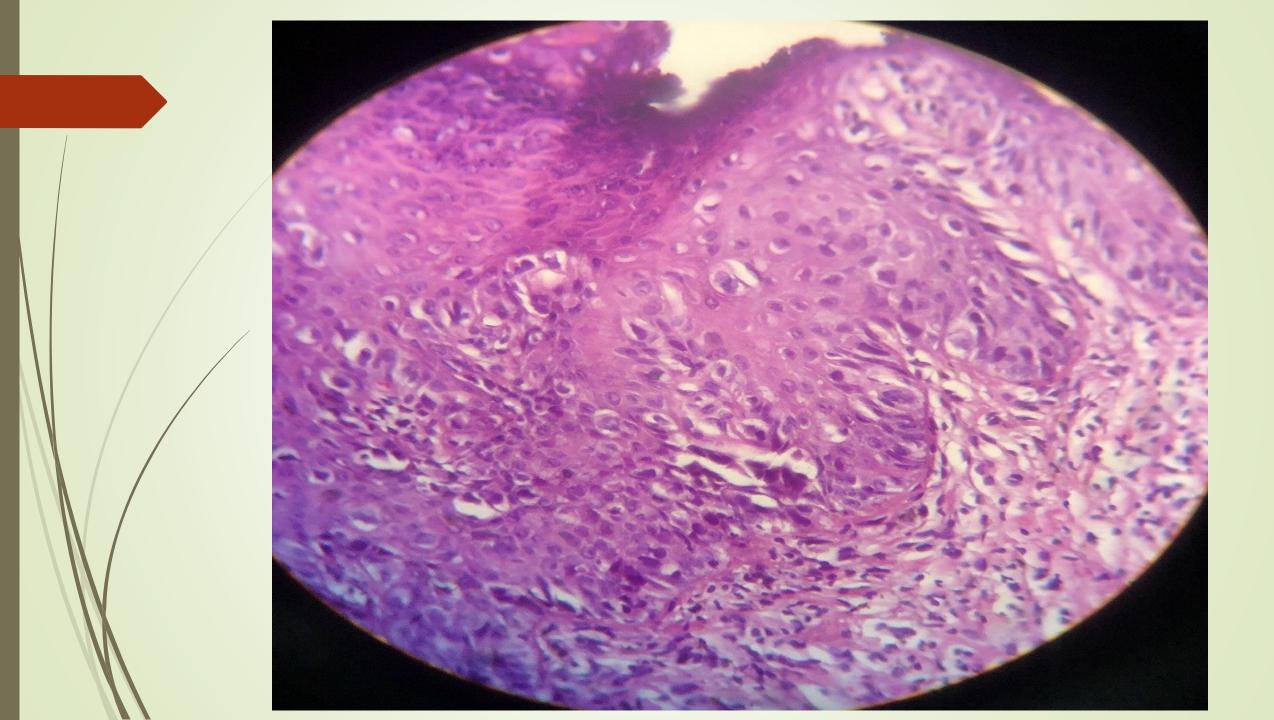
Supervised by: Dr. A. Naeimi

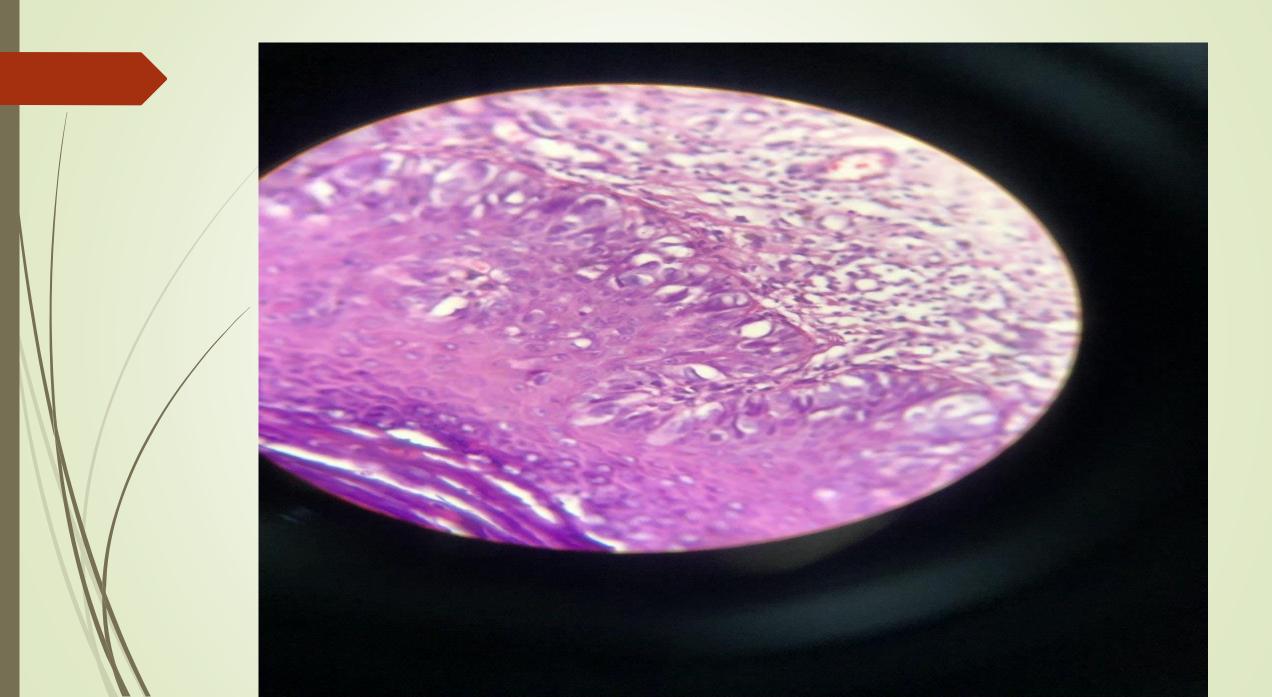
Macroscopy:

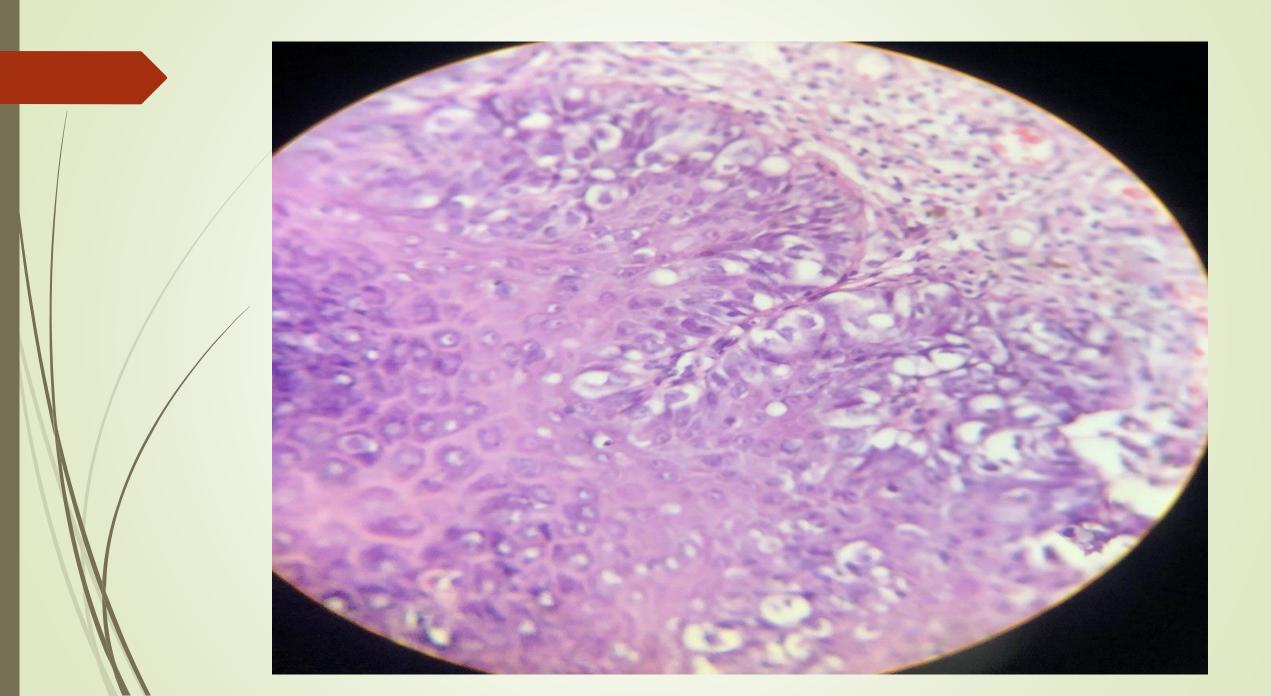
■ Specimen labeled as **Vulvar lesion**: Consists of six soft cream tissue fragments measuring 1.5 * 0.7 * 0.5 cm.

Microscopy:







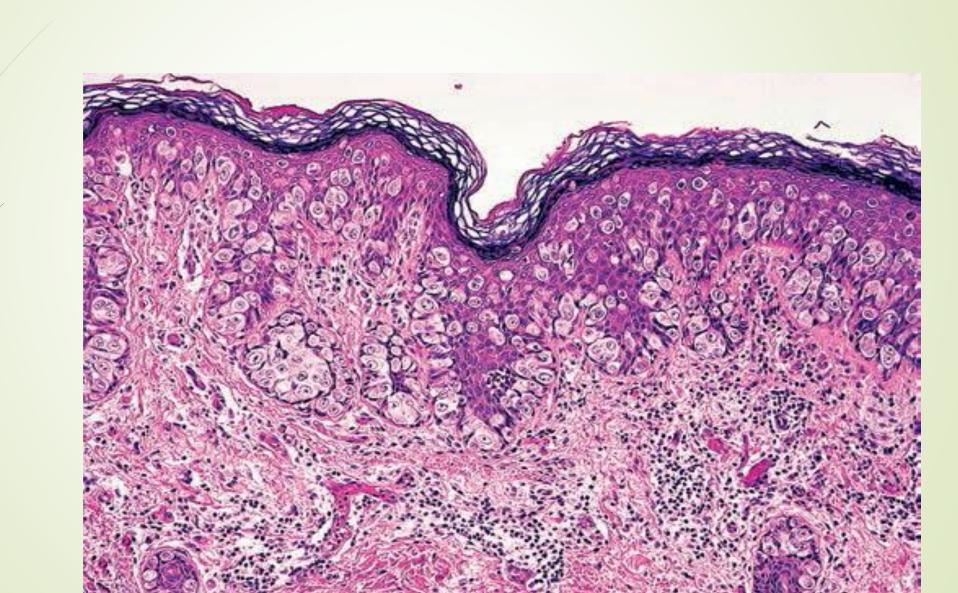


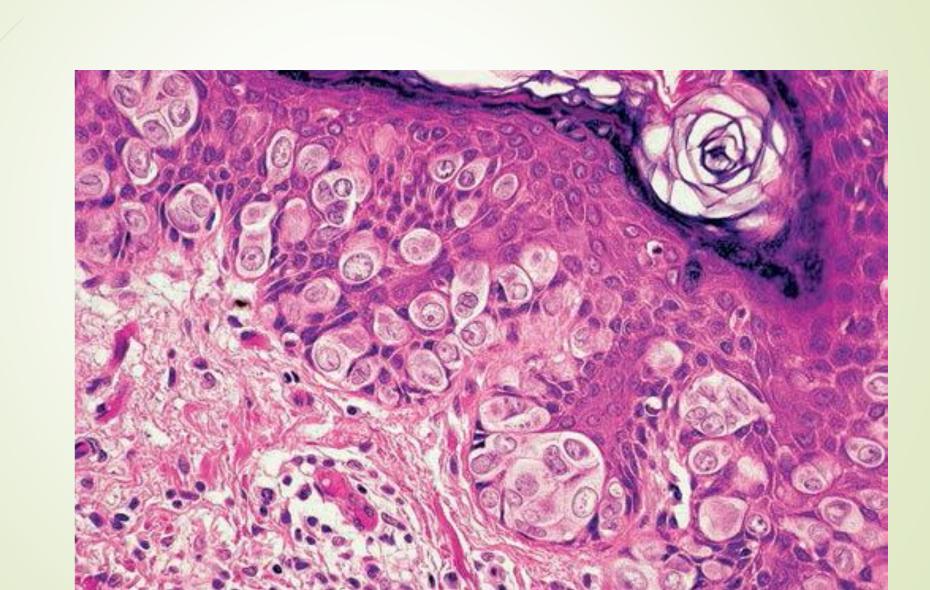
What's your diagnosis?

Paget disease

- Paget disease is a malignant tumor of the vulva that can be subclassified as primary Paget disease, or secondary Paget disease, when it represents spread from an underlying carcinoma of rectum, bladder or endocervix.
- Paget disease is a vulvar adenocarcinoma of uncertain histogenesis. It could be viewed as:
- ✓ a sweat gland carcinoma arising primarily from the intraepidermal portion of the glands (acrosyringium)
- ✓ a carcinoma of multipotential (adnexal stem cells) residing in the infundibulo-sebaceous unit of the hair follicles and other adnexal structures that differentiate along glandular (sweat gland) lines
- ✓ as being derived from a population of CK7-positive clear cells associated with the openings of the ducts of the mammary-like glands of the vulva, known as Toker cells

- Clinically, Paget disease presents as a crusting, elevated scaling erythematous rash in the labia majora, labia minora, and/or perineal skin of adult and elderly patients
- Microscopically, the epidermis contains large pale tumor cells that form solid nests, glandular spaces, or a continuous layer along the epidermal basement membrane and also in pilosebaceous structures and sweat ducts
- A cleft often develops between the row of malignant cells and the overlying keratinocytes, resulting in a low-power appearance sometimes reminiscent of an acantholytic suprabasal bulla
- Paget disease can also be misinterpreted as **malignant melanoma**. It should be noted that the presence of melanin granules in some tumor cells does not rule out the diagnosis of Paget disease





- Histochemically, some or all of the tumor cells contain acidic mucin, as evidenced by their positivity for Mayer mucicarmine and aldehyde fuchsin stains.
- Immunohistochemically, these mucins are positive for MUC1 and MUC5AC, the latter in striking contrast with Paget disease of the breast. They are also reactive for HGM-45, a marker associated with gastric surface mucous cells
- Other positive marker:
- ✓ Pankeratin
- ✓ Cytokeratin 7 (CK7)
- **✓** Epithelial membrane antigen (EMA)
- **✓** Carcinoembryonic antigen (CEA)
- ✓ B72.3
- **✓ GCDFP-15** (a marker of apocrine differentiation)
- ✓ S-100 protein is positive in up to one-third of the cases but HMB-45 and Melan-A are negative
- ✓ CDX2 negative (in contrast to a secondary Paget disease associated with rectal carcinoma)

Variably expresses ER and PR and frequently expresses androgen receptor

- ✓ CK7 + / CK20 -
- ✓ GATA 3

The difference between paget disease of the breast and vulva:

- Paget disease of the breast is nearly always associated with an underlying carcinoma, which may be intraductal or invasive and the intraepidermal malignant cells are more often than not mucin-negative.
- In contrast, the majority of the cases (about 90%) of vulvar Paget disease are not associated with an invasive carcinoma and are usually (although not always) positive for mucin stains

Unfortunately, the microscopic extent of the disease is often greater than that suspected from clinical examination and this should be taken into account at the time of surgery

■ The status of resection margins is only minimally related to the incidence of local recurrence

Cases of Paget disease with an invasive component beyond the microinvasive stage have a high likelihood of nodal involvement

تاريخ جواب ١٠٠/١٢/٠١ مركز أموزشي درماني شهيد بهشتي 1444 گزارش أزمایشگاه پاتولوژي درخواست ۱۴۰۰/۱۲/۰۱ تاريخ خدمت ۱۰/۱۲/۰۱ كد ملي: ١١٣١١٣٧٢٥ سن بيمار: ٣٦ سال تام پدر: ثام مليحه احمدي جنسيت: مونث پزشك:دكتر فهيمه ثابت بديرش: سريايي ش ورود ۲۰۶۲۵۲۹ بیمه: تامین اجتماعی سرپانی [۱۱۴۱۱۴۷۴۷۵] وضعيت تاهل: مليت : ايراني ١٩١٢٩١٧١٢٥٠ . فسقهان - شيخ بهثي - گوچه ٢١ين يست جابجائي ادرس و شماره تلفن: 2673 : Jah : N بزشك تاييد كننده: دكتر آذر تعيمي Macroscopic description: با برجسب ضايعه ولو : شامل ۶ قطعه بافت كرم خاكست فيضعا به ابعاد ١/٥٠٠/٧٠٠ س م Microscopic description: دربررسې ميکروسکوپې نمونه ضايعه وولو : مقاطعی از این درم با تغییرات کراتوز و هیبرکراتوز و پایپلوناتوز حفیف مشاهده می شود در ناحیه تحنانی این درم پرولیفراسیون سلولهای این تلیالی با نمای آشیانه های سلولی دارای سیتوبلاسم های روشن و هسته های با أتيبيسم و يلئومورفيسم مشاهده مي شود تهاجم به استروماي زيرين ديده نمي شود IHC study on block 2673-2 results as follow: CK-7: positive CEA: Positive HMB-45: Negative Diagnosis: Vulvar lesion biopsy: - Paget disease - Invasion to stroma is not seen Margin evaluation is not possible (due to fragme ntation) C:51.9 M:8542/3 ياتولوژيست :