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WHAT'S NEW IN PATHOLOGY?

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THE LATEST NEWS IN GYN (PART 1)

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VULVA

• The World Health Organization has adopted the Lower Anogenital Squamous Terminology (LAST) recommended by the College of American Pathologists and the American Society for Colposcopy and Cervical Pathology for pre-cancerous squamous lesions of the vulva.

◦ Low grade squamous intraepithelial lesion (flat condyloma and vulvar intraepithelial neoplasia usual type – VIN1)

◦ High grade squamous intraepithelial lesion (vulvar intraepithelial neoplasia usual type – VIN2 or VIN3)

◦ Vulvar intraepithelial neoplasia, differentiated type

• Vulvar squamous cell carcinomas with a fibromyxoid stromal response are associated with a higher risk of perineural invasion, recurrence and lymph node spread, compared to non-infiltrative invasive tumors.

• We have added a new topic — vulvar **mammary type myofibroblastoma**

CERVIX

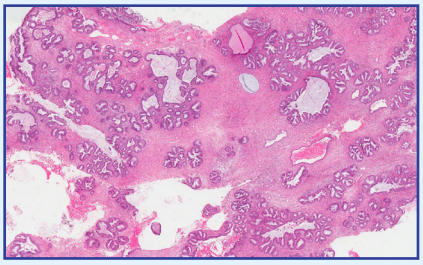
• A new classification for HPV-associated invasive endocervical adenocarcinoma has been proposed. It is based on the pattern of stromal invasion, which is associated with the risk of regional nodal metastases and adverse outcome:

◦ **Pattern A**: Non-destructive growth (0% prevalence of nodal spread).

◦ **Pattern B**: Focal destructive invasion (4% prevalence of nodal spread).

◦ **Pattern C**: Diffuse destructive invasion (23% prevalence of nodal spread).

• New insights on the morphology, immunophenotype and histogenesis of gastric-type endocervical adenocarcinoma have been recently published and incorporated into the current WHO classification.



Non-destructive endocervical adenocarcinoma (Silva system Pattern A): well differentiated glandular proliferation without destructive infiltration, desmoplasia or confluent growth. These carcinomas have a negligible risk of extrauterine spread or recurrence.

UTERUS — ENDOMETRIUM

• The current World Health Organization has unified the terminology for endometrioid glandular precursors into a two-tier classification:

◦ Benign (non-atypical) endometrial hyperplasia

◦ Atypical endometrial hyperplasia / endometrioid intraepithelial neoplasia

◦ The terms "simple" and "complex" have been removed from the classification, as they are not reproducible or significantly associated with differences in malignant outcome.

◦ The term "endometrial intraepithelial neoplasia" has been recently endorsed by The American College of Obstetricians and Gynecologists and the Society of Gynecologic Oncology.

• We have added a new topic on progestin therapy related changes in endometrial hyperplasia.

• In recent years, our understanding of the molecular landscape of endometrial carcinoma has increased, leading to a "molecular classification" useful to separate endometrioid and serous endometrial carcinomas into clinically and biologically different groups:

◦ Ultra mutated: Characterized by mutations in POLE and POLD1 genes. Good prognosis.

◦ Mismatch repair deficient: Alterations on mismatch repair genes. Intermediate prognosis.

◦ Copy number low: Low number of mutations and copy number variations. Intermediate prognosis.

◦ Copy number high: Frequent mutations and copy number variations. Frequent TP53 mutations. Poor prognosis.

MEET THE AUTHOR

Dr. Carlos Parra-Herran joined the editorial board of PathologyOutlines.com in 2014 and oversees the contents in gynecologic and obstetric pathology.

His post-graduate education included fellowship training in Brigham and Women's Hospital and Sunnybrook Health Sciences Centre.

He has co-authored 28 peer-reviewed articles in pathology; his previous research has focused on biomarker discovery in gynecologic pathology and characterization of uterine myxoid mesenchymal neoplasms.