

子宮頸細胞病理教學手冊

單元 2-2

Glandular cells, endocervical

Non-AIS

(112 年度)

資料提供：台灣病理學會細胞委員會 / 劉之怡 醫師



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Case #2-4

- 52 y/o lady
- Routine follow-up pap smear in GYN OPD
- Figure 1-3

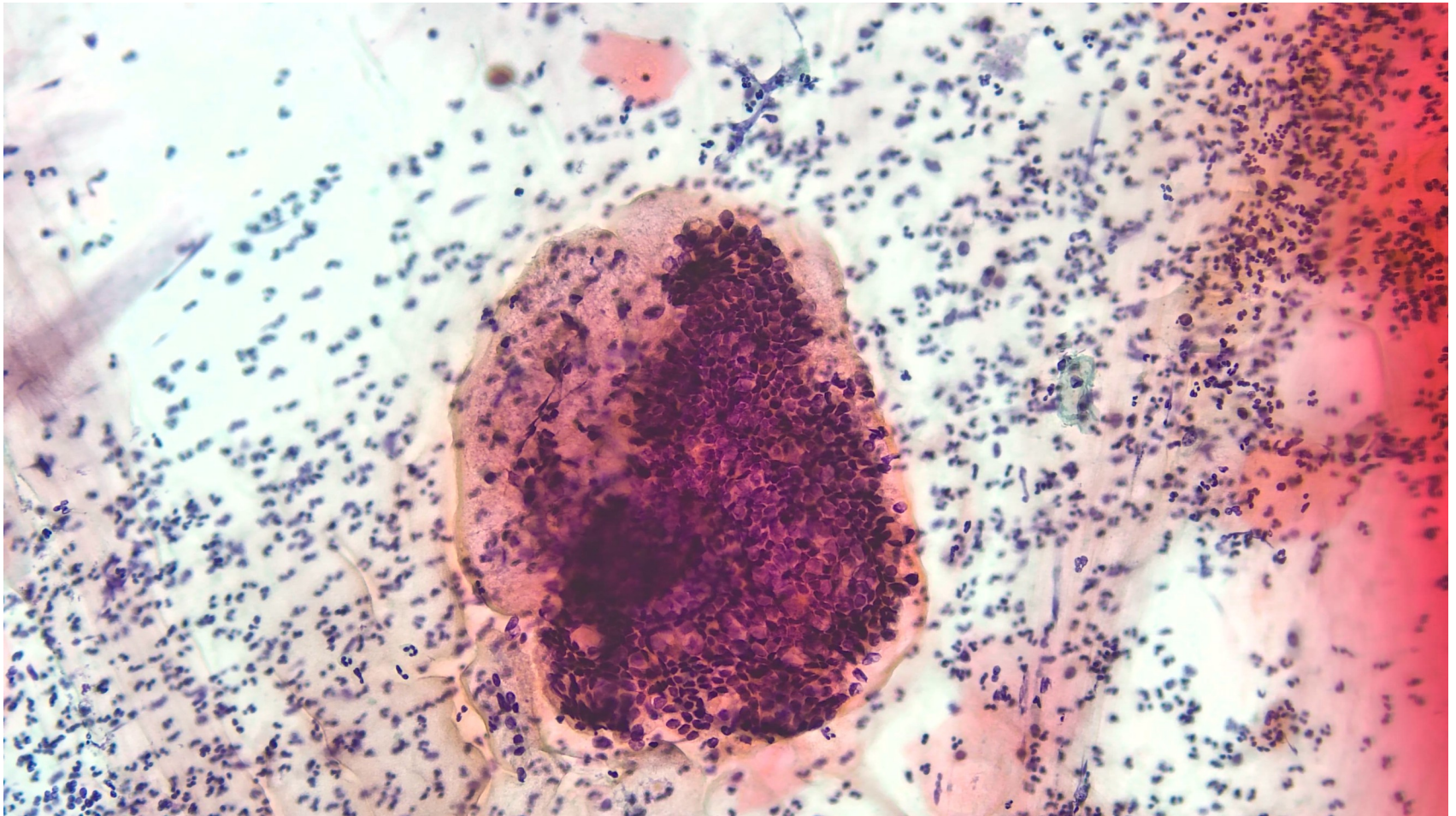


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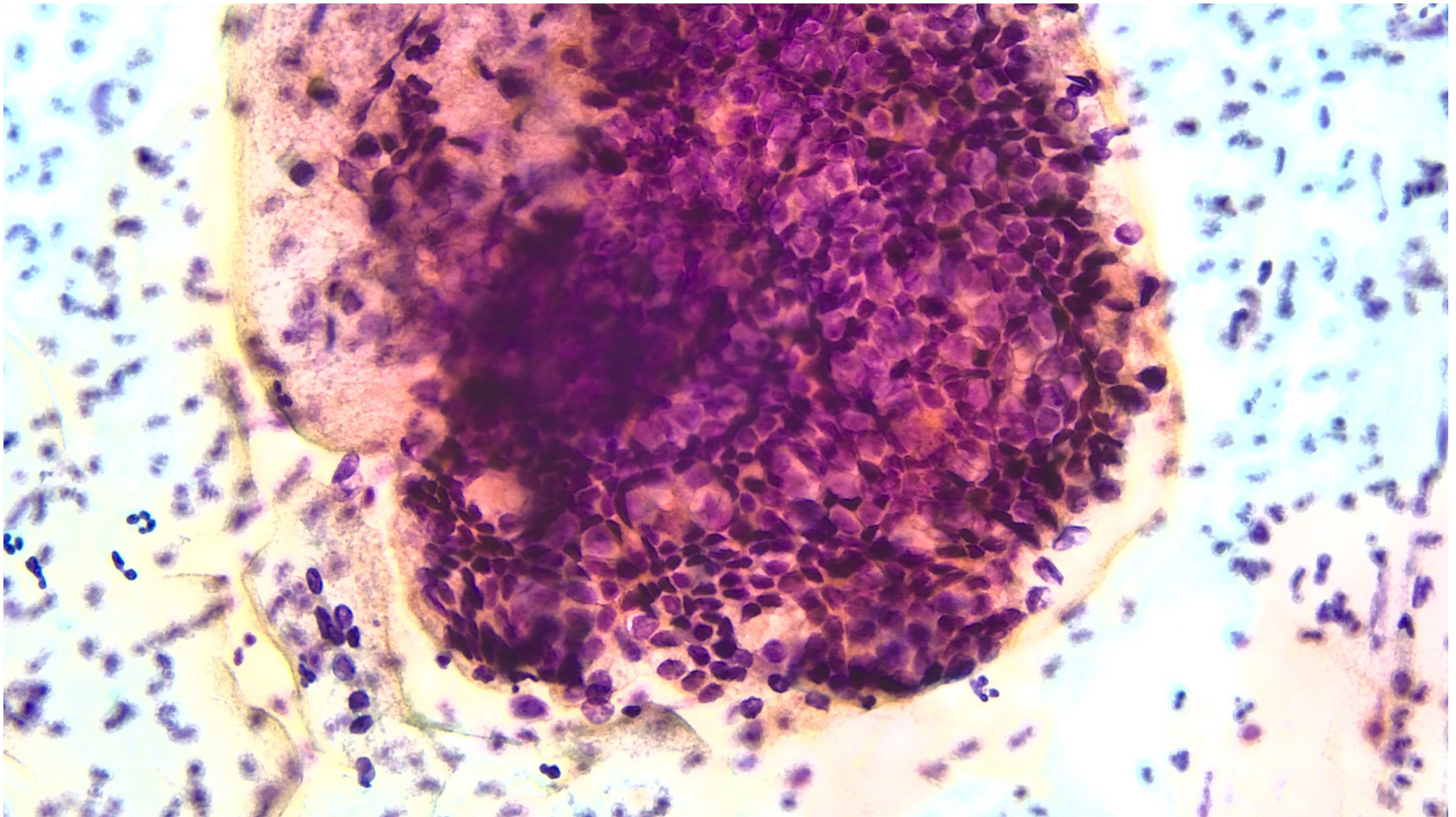


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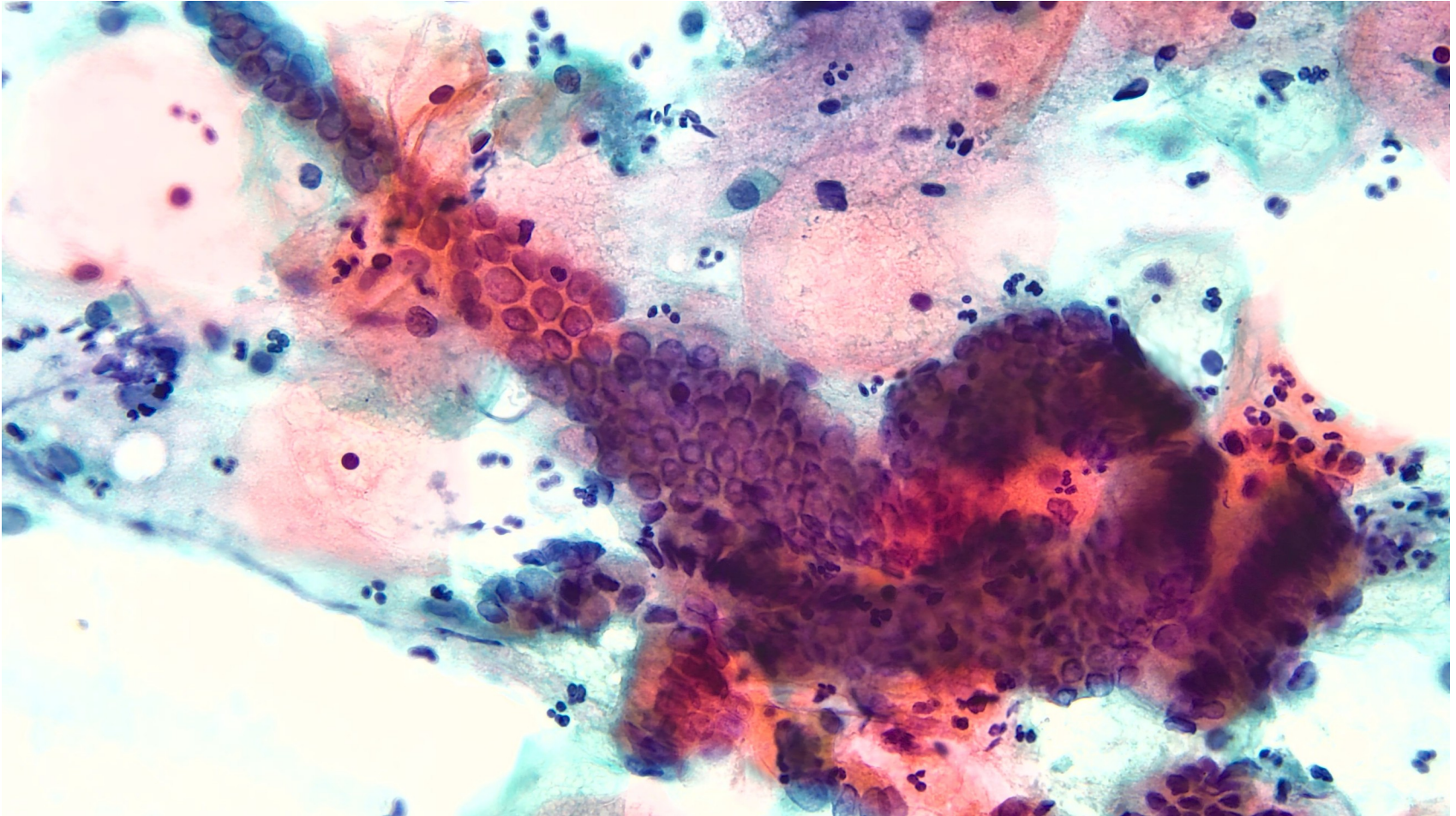


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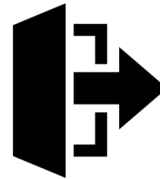
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Case #2-4

Your interpretation ?

please answer via link:



Case #2-5

- 38 y/o lady
- Bloody discharge; pap smear in GYN OPD
- Figure 1-3

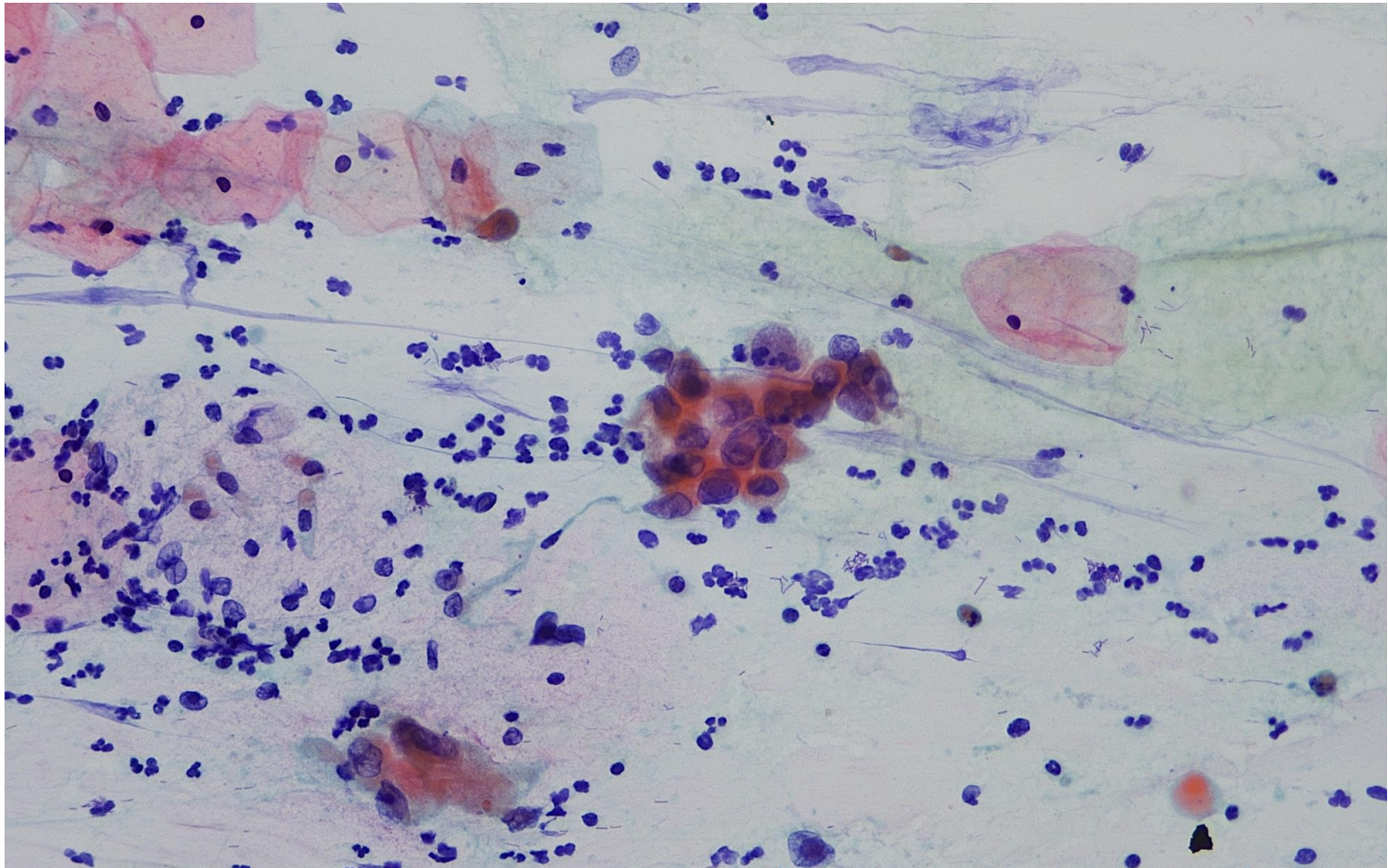


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Case #2-5

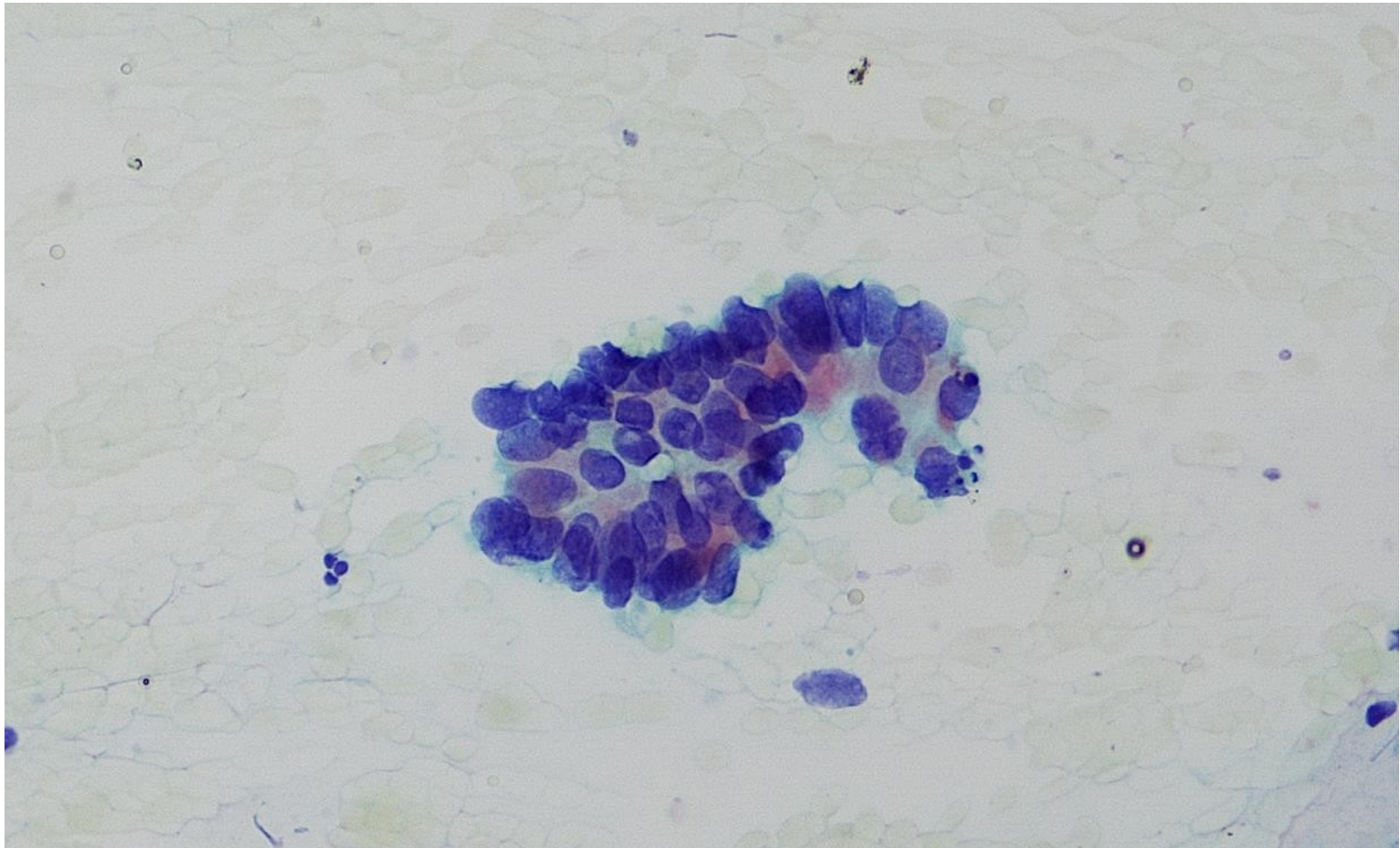


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Case #2-5

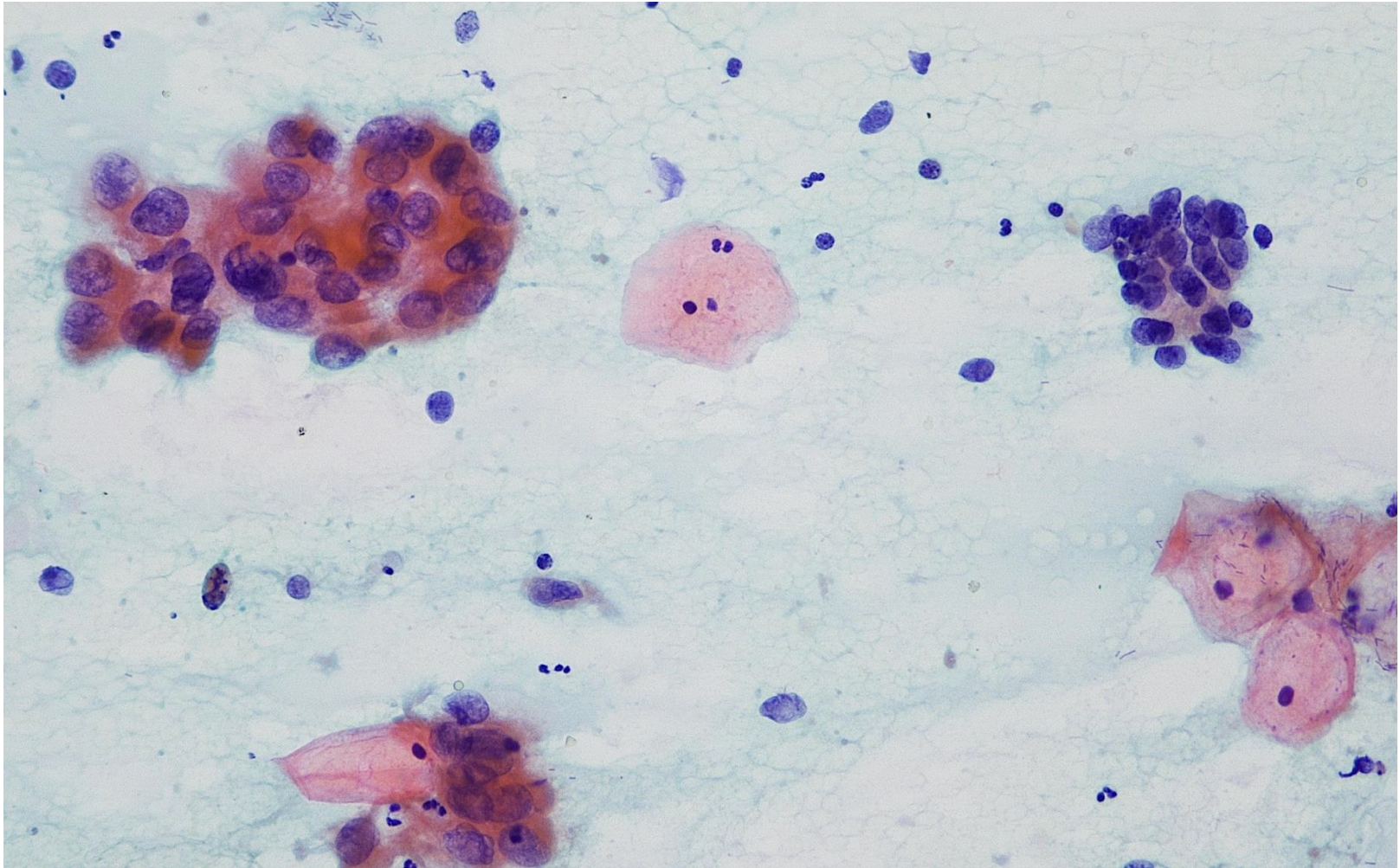


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Case #2-5



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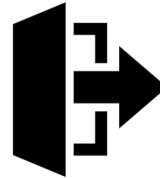
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Case #2-5

Your interpretation ?

please answer via link:



Case #2-6

- 61 y/o lady
- Increased vaginal discharge; pap smear in GYN OPD
- Figure 1-3

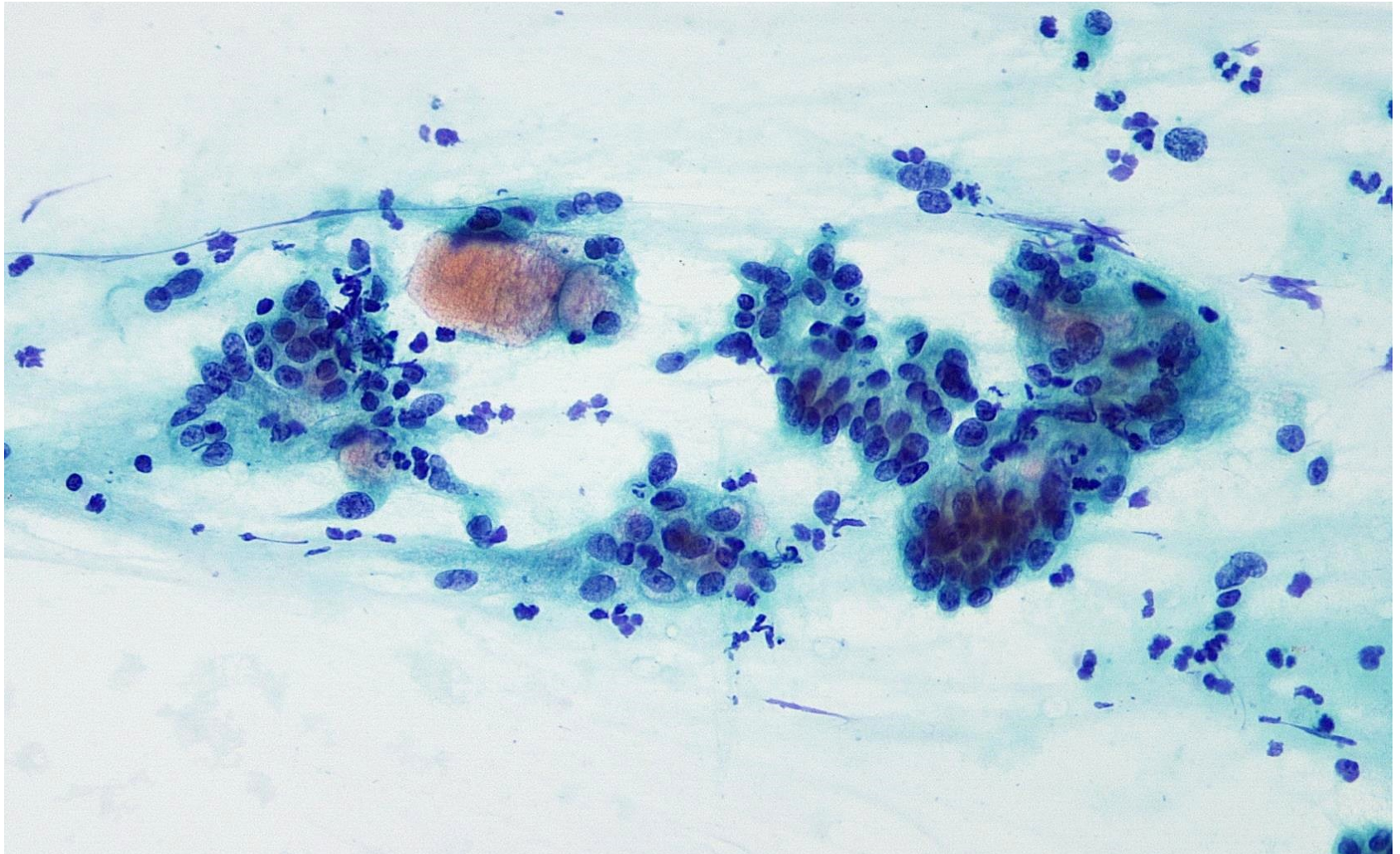


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Case #2-6

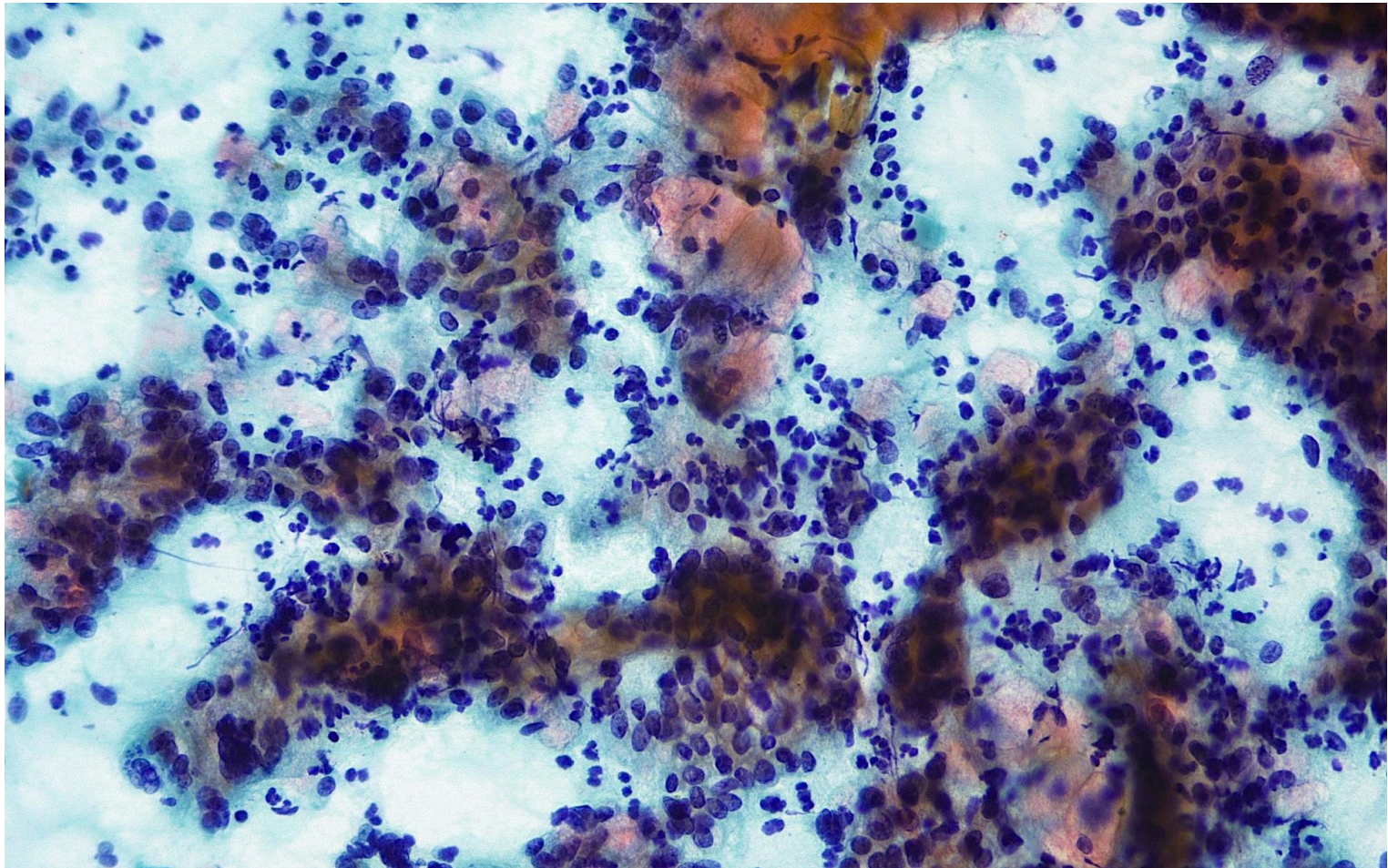


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Case #2-6

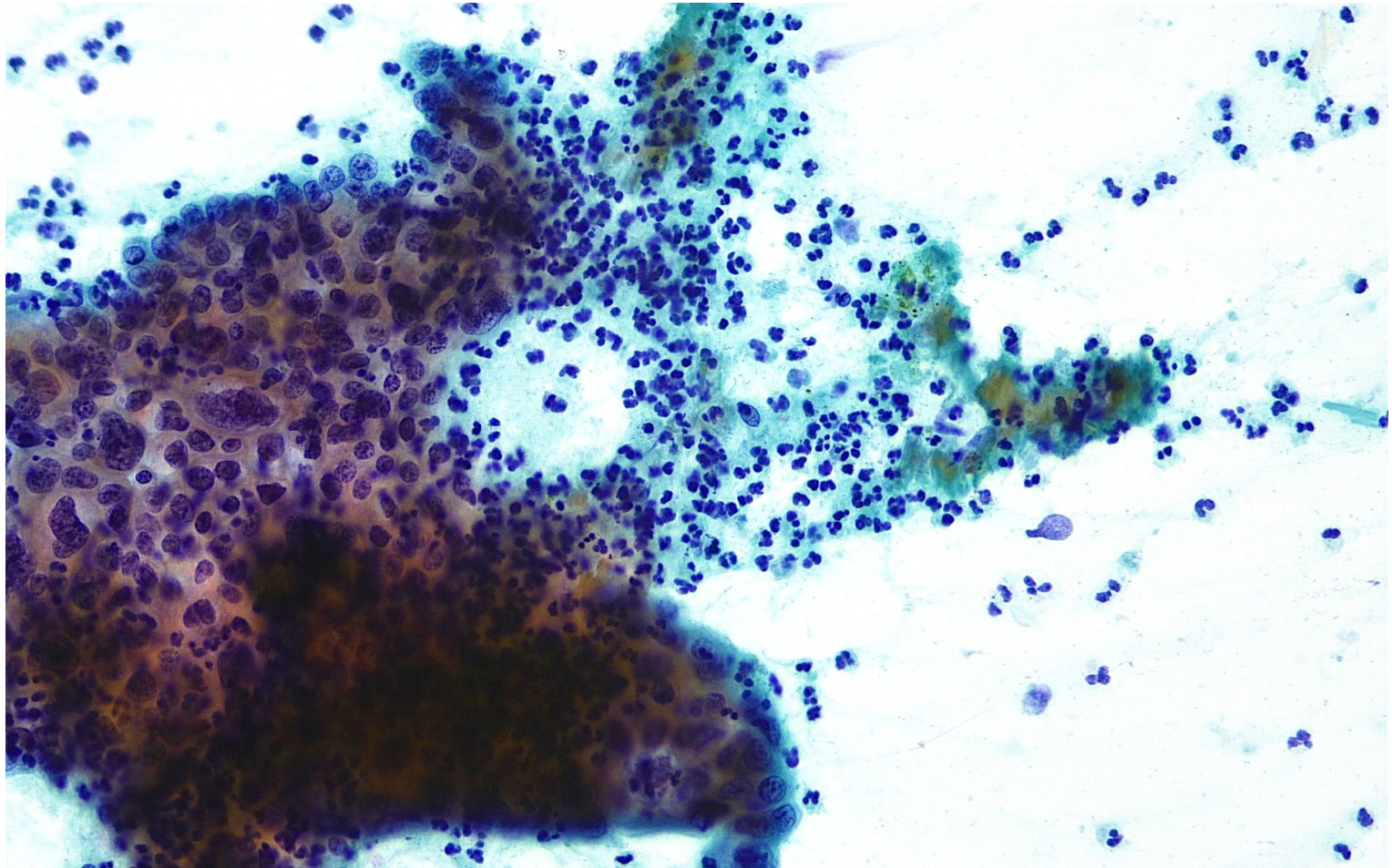


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Case #2-6



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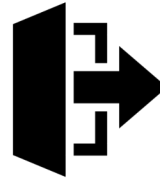
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Case #2-6

Your interpretation ?

please answer via link:



Case #2-4

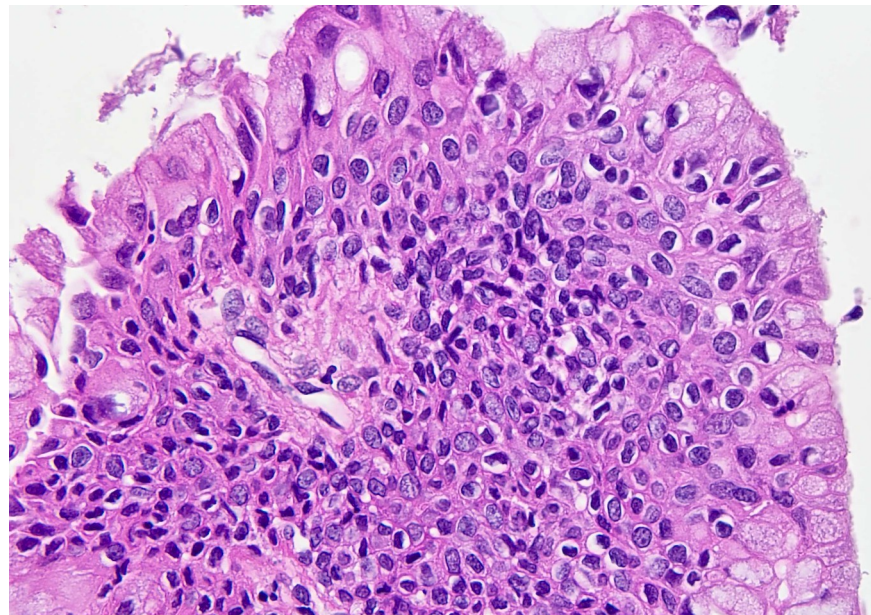
➤ Cytology result: AGUS? NILM?

➤ Categories:

Negative for intraepithelial lesion or malignancy / NILM

➤ Diagnosis:

Reserve cell hyperplasia



Case #2-4

Endocervical / reserve cells

Key points:

- ✓ Endocervical reserve cells: Subcolumnar, small, fragile cells; usually associated with endocervical cells
- ✓ Endocervical columnar cells: Mucus-producing columnar cells, sharp cell borders
- ✓ Palisading or honeycomb morphology depending on angle of view
- ✓ With secretory activity cytoplasm is abundant due to mucin accumulation compressing nucleus to basal end

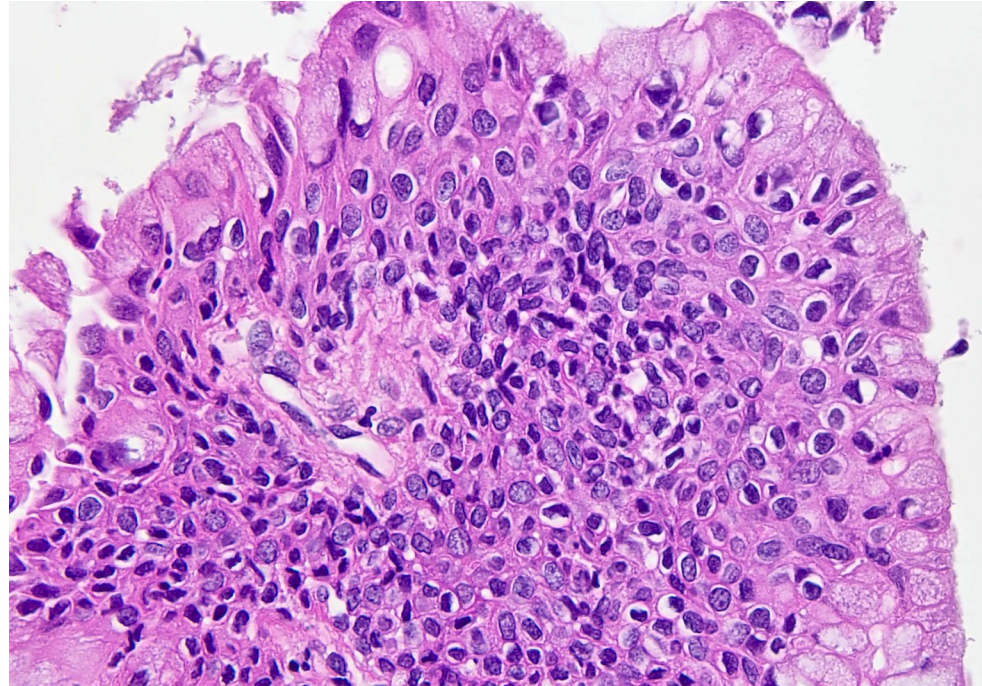
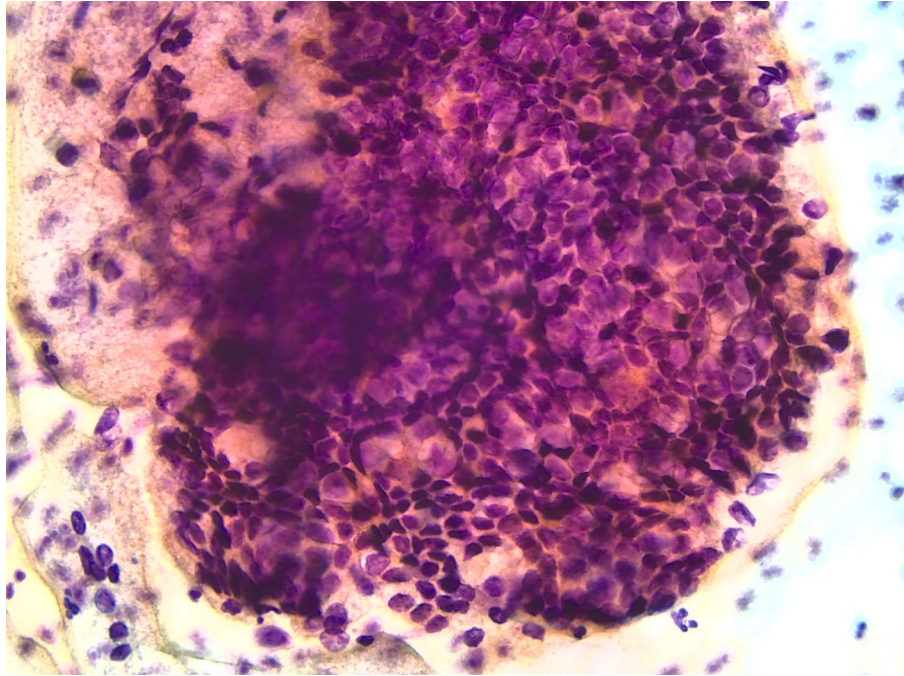


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Case #2-4



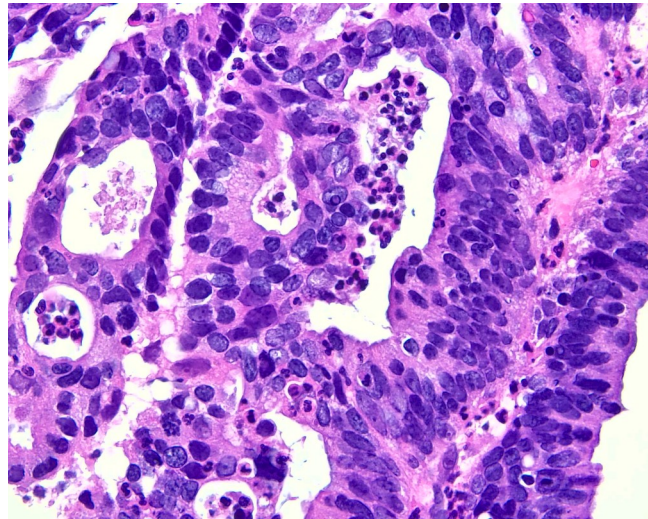
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Case #2-5

- Cytology result: AGUS favor neoplasm
- Categories:
Epithelial Cell Abnormality / Glandular cells
- Diagnosis:
Endocervical adenocarcinoma



Case #2-5

Atypical endocervical cells, favor neoplastic

Key points:

- ✓ Columnar endocervical-type cells presenting as large sheets, strips, and rosettes
- ✓ Nuclear crowding, overlapping, and ↑ N:C ratios
- ✓ Ill-defined cell borders due to overcrowding
- ✓ Hyperchromasia with even chromatin; chromocenters may be better seen on liquid-based Paps

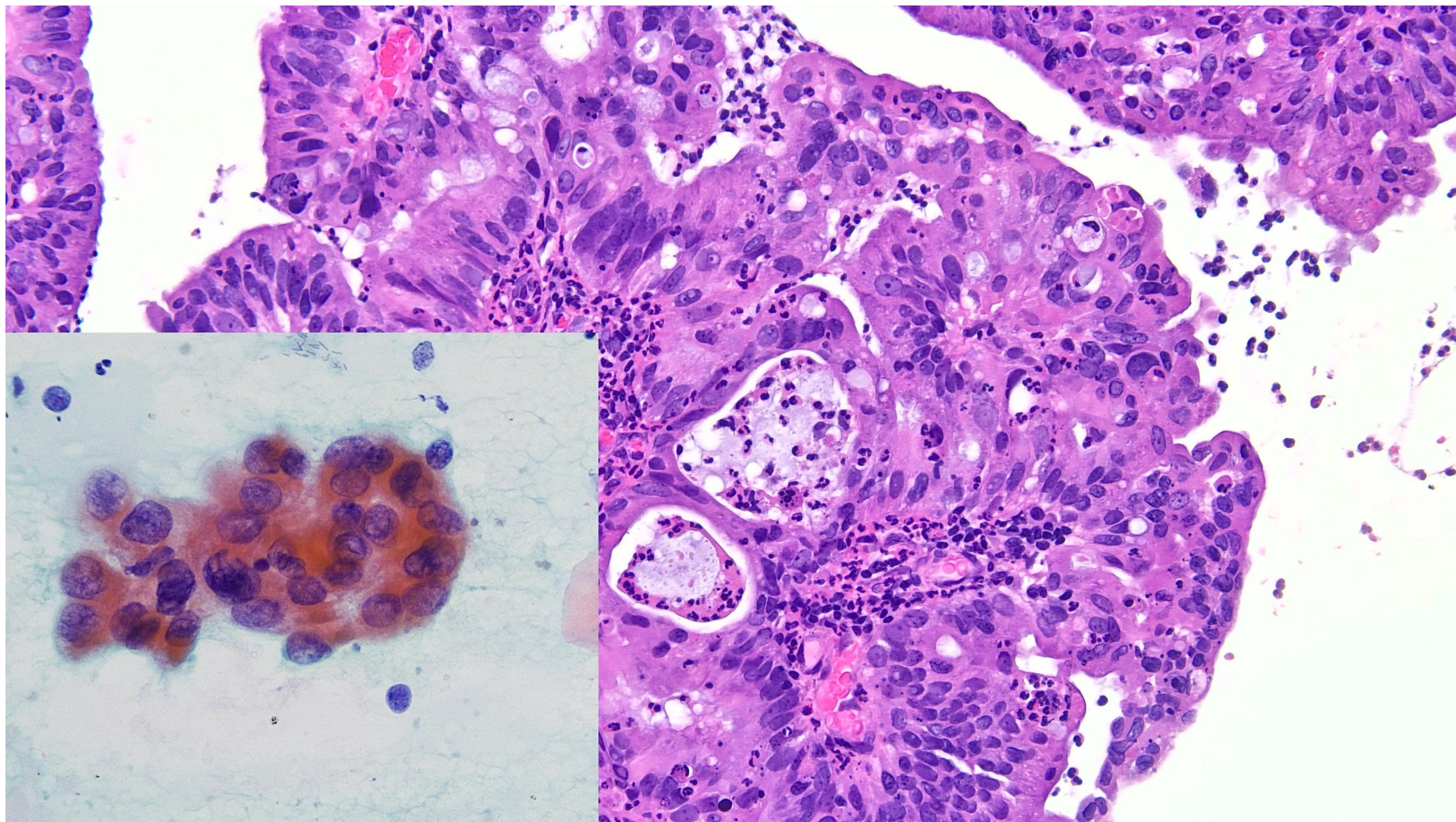


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Case #2-5



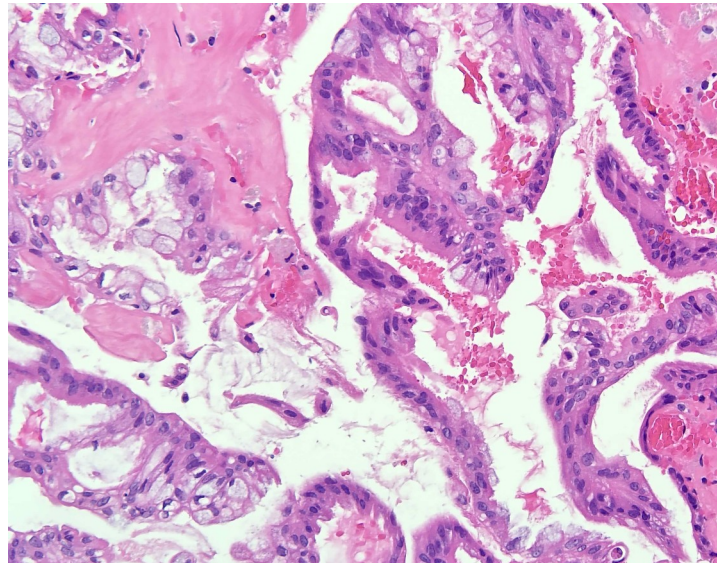
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Case #2-6

- Cytology result: Adenocarcinoma, endocervical
- Categories:
Epithelial Cell Abnormality
- Diagnosis: Endocervical adenocarcinoma



Case #2-6

Endocervical adenocarcinoma

Key points:

- ✓ Usually cellular irrespective of preparation type
- ✓ Strips, rosettes, 3D groups, large sheets, single intact malignant cells, cell balls
- ✓ Columnar configuration of cells arranged in sheets, rosettes, and strips but with loss of polarity
- ✓ Chromatin becomes vesicular, and nucleoli appear as tumor becomes invasive
- ✓ Nuclear membrane irregularity and pleomorphism increase with increasing grade as does mitotic activity
- ✓ Cytoplasm is finely vacuolated and diathesis in background

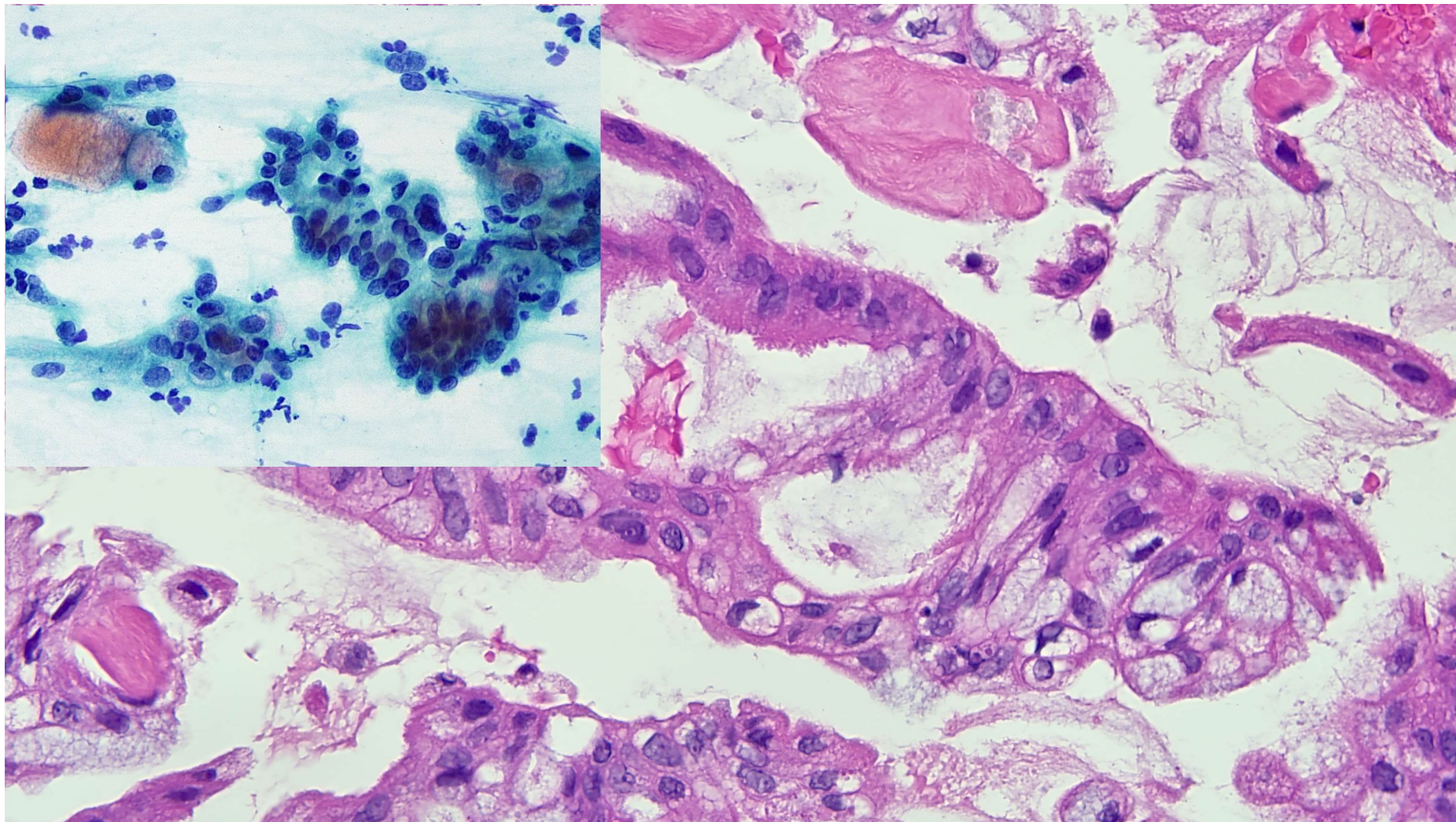


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Case #2-6



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Glandular cell abnormalities

The Bethesda System broadly categorizes glandular cell abnormalities into:

- Endocervical adenocarcinoma *in situ* (AIS)
- Atypical glandular cells (AGCs)
 - Endocervical cells:
 - NOS or specify in comments
 - Favor neoplastic
 - Endometrial cells: NOS or specify in comments
- Adenocarcinoma (AdCa)
 - Endocervical
 - Endometrial
 - Extrauterine
 - NOS

Atypical glandular cells (AGC)

- The incidence of atypical glandular cells (AGC) is approximately 0.18–0.74% of all cervical smears. Clinical significant lesions is reported in 42-83% of AGCs.
- An overall high risk than ASC-US: Squamous abnormality in 54-88%; glandular abnormality in 12-46%
- A high degree of suspicion, good clinical history, and the presence of diagnostic cytomorphological findings are essential for the proper interpretation of glandular cell abnormalities.

Khan, M.Y.A.; Bandyopadhyay, S.; Alrajjal, A.; Choudhury, M.S.R.; Ali-Fehmi, R.; Shidham, V.B. Atypical glandular cells (AGC): Cytology of glandular lesions of the uterine cervix. *Cytojournal* 19, 31, doi:10.25259/CMAS_03_11_2021.

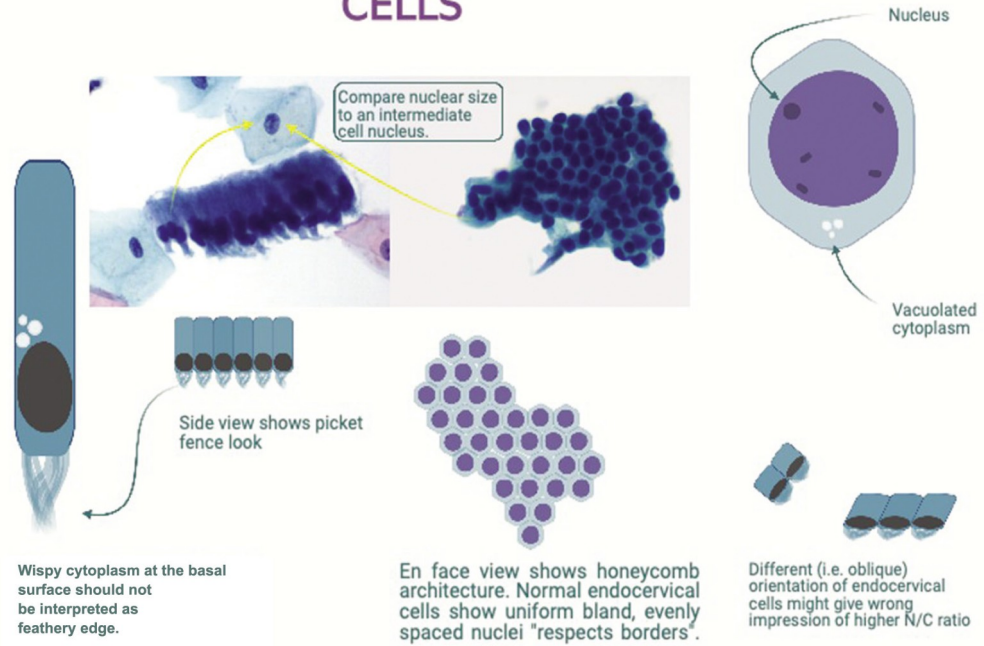


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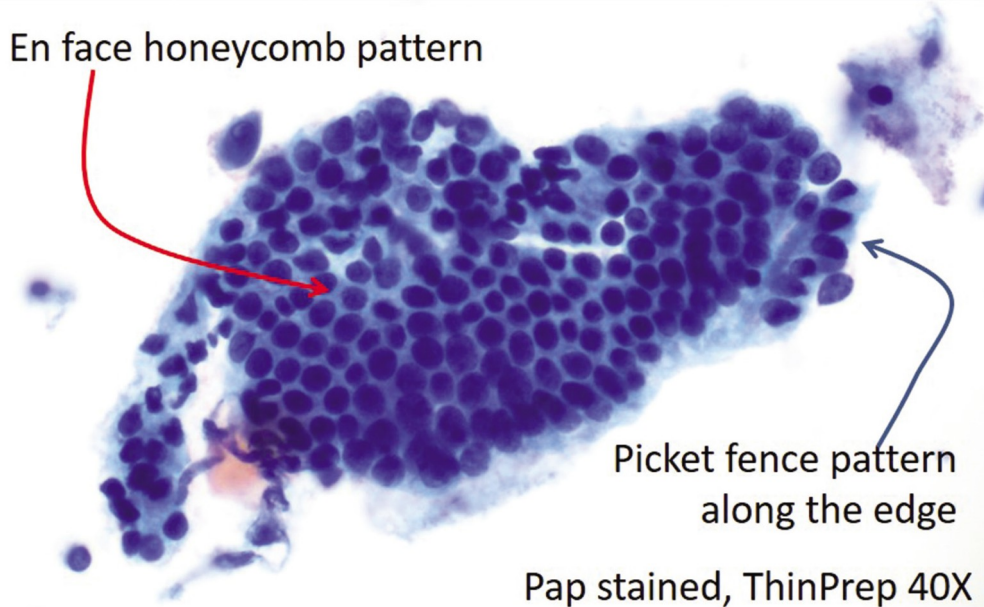
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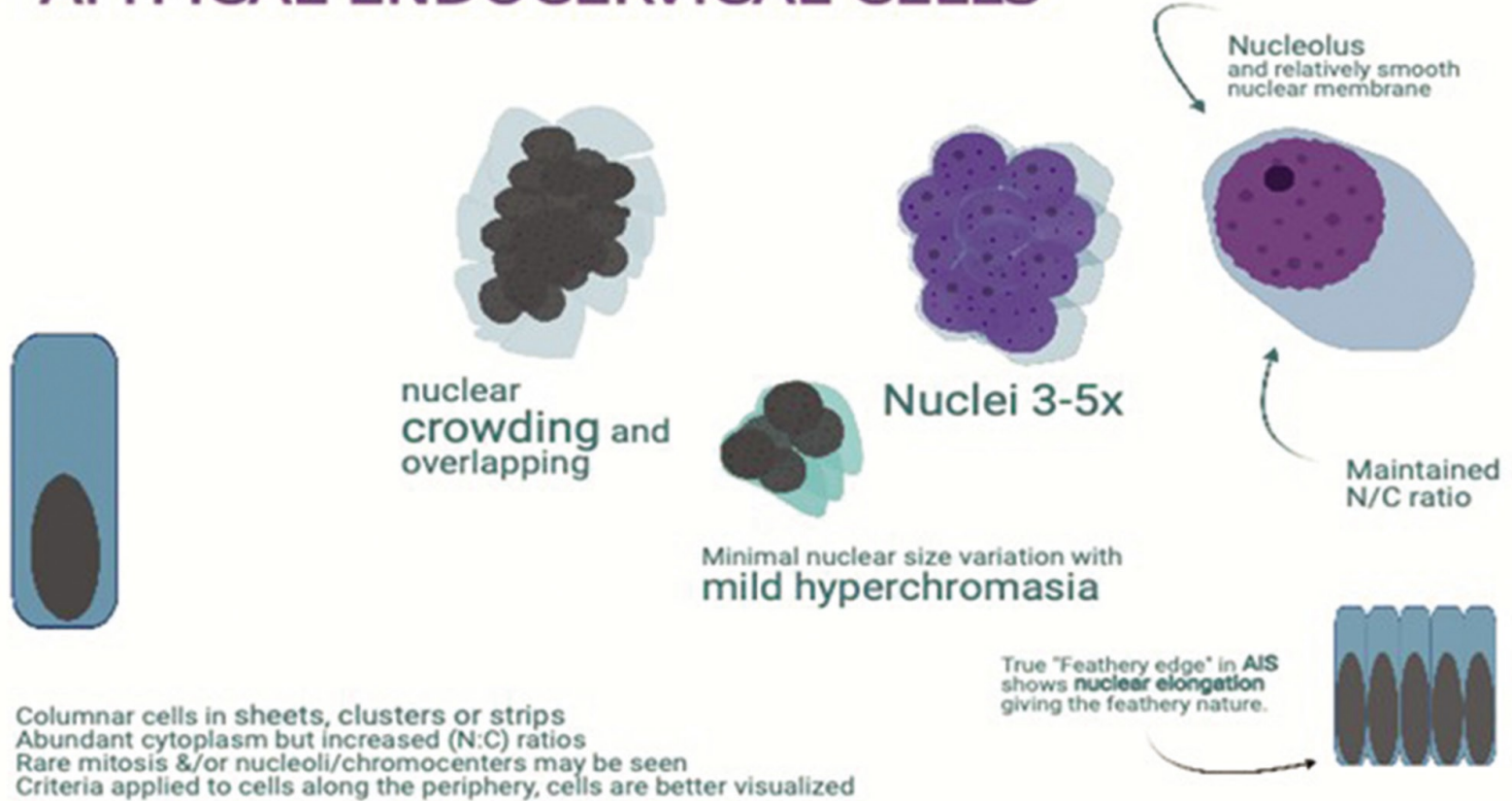
ENDOCERVICAL CELLS



En face honeycomb pattern



ATYPICAL ENDOCERVICAL CELLS



AGC (endocervical), favor neoplastic

- AGCs with a morphology that is suggestive of endocervical adenocarcinoma but either quantitatively or qualitatively falls short of an interpretation of endocervical adenocarcinoma.

Diagnostic criteria:

- Endocervical cells with architectural atypia: Columnar cells arranged in strips and sheets with nuclear crowding, overlap, and/or pseudostratification
- High N/C ratio and rosettes (gland formations)
- Large nuclei (3 to 5X size of ICN) hyperchromatic nuclei with coarse chromatin with heterogeneity
- Occasional mitoses with or without apoptotic bodies.



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Adenocarcinoma, endocervical

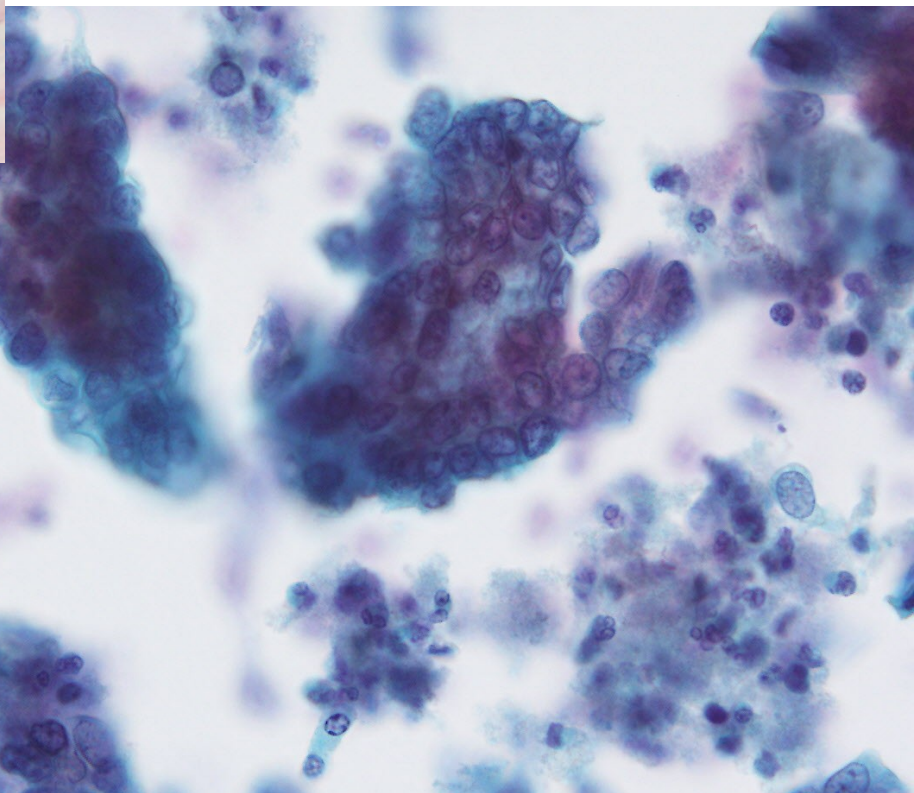
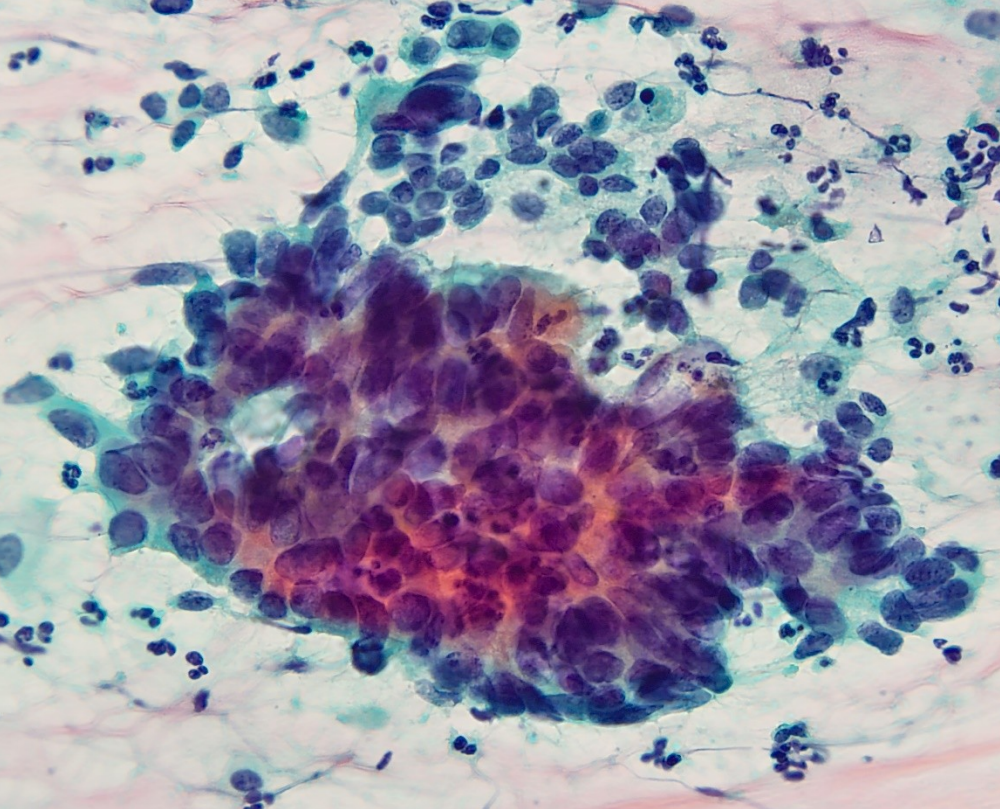
- Pap smears show diverse morphologic appearance based on the histologic subtypes of invasive adenocarcinoma.
- On low power, adenocarcinoma cells may present in acinar or papillary clusters, or as highly vacuolated groups, or in large complex structure like a microbiopsy, or as singly scattered cells.
- The best possible factor that supports adenocarcinoma is tumor diathesis. These findings may be present on the background of cytomorphological features of AIS in early invasive adenocarcinoma.

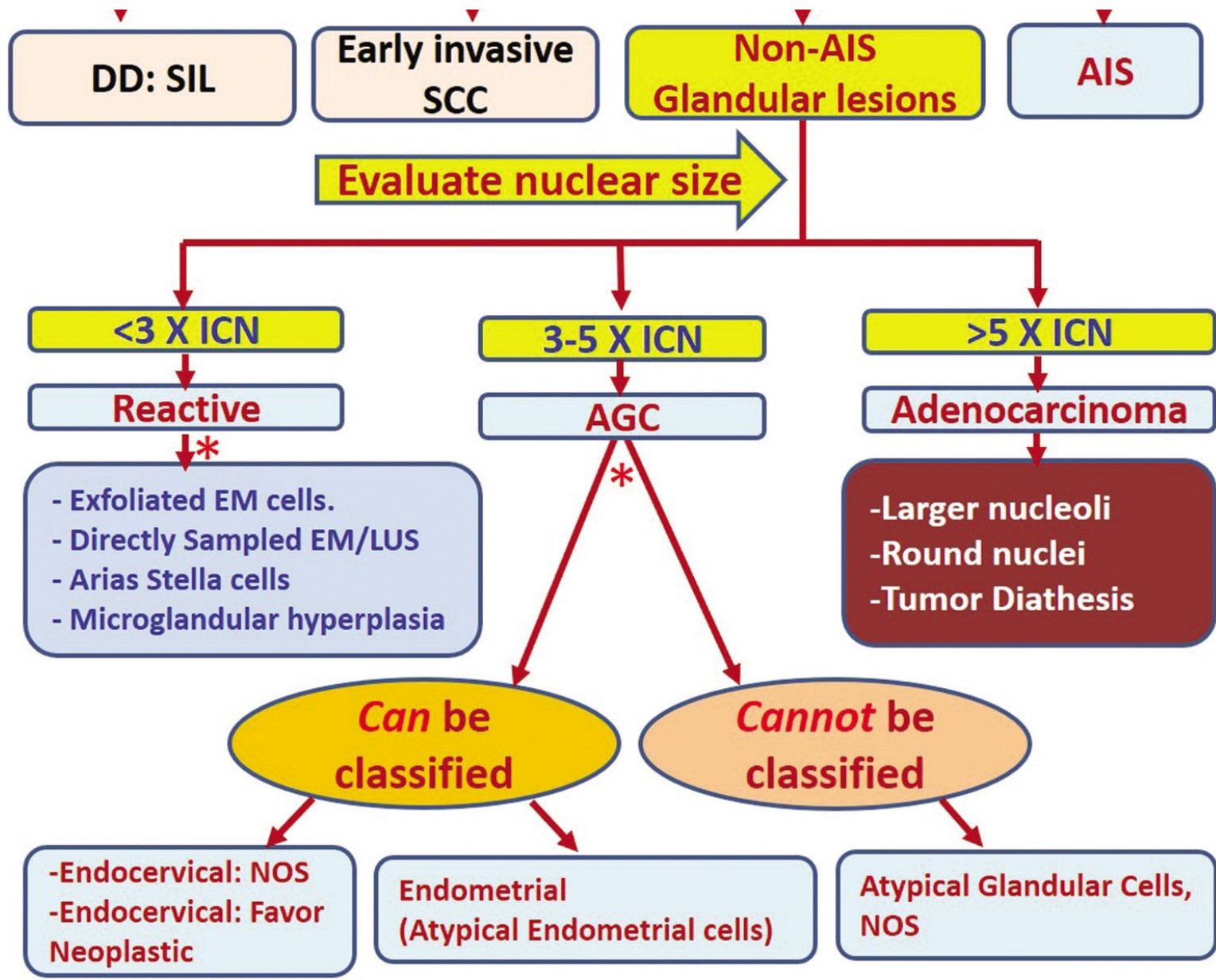


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References

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- Mody Dina R, Michael J Thrall and Savitri Krishnamurthy. 2022. Diagnostic Pathology (version 3rd ed). Philadelphia: Elsevier.
- Khan, M.Y.A.; Bandyopadhyay, S.; Alrajjal, A.; Choudhury, M.S.R.; Ali-Fehmi, R.; Shidham, V.B. Atypical glandular cells (AGC): Cytology of glandular lesions of the uterine cervix. Cytojournal 19, 31, doi:10.25259/CMAS_03_11_2021.