Cytyc Corporation - Case Presentation Archive - April 2001 ThinPrep®PapTestTM

History: 39 Years Old LMP: Day 8

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*The images, analysis and diagnosis for this case study were provided by an independent physician. All conclusions and opinions are those of the physician and not Cytyc Corporation.



Slide 1



Slide 2



Slide 3



Slide 4



Slide 5





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Discussion:

Slide 1: A small cluster of squamous metaplastic cells with increased N/C ratio and coarse chromatin.

Slide 2: A large cluster of more mature squamous metaplastic cells with increased N/C ratio, coarse chromatin and slightly irregular nuclear membranes.

Slide 3: A large cluster of squamous cells with increased N/C ratio and coarse chromatin (note talc crystal).

Slide 4: Single and clustered atypical squamous cells with increased nuclear size of 2 1/2 times adjacent reference intermediate cell.

Slide 5: A large cluster of more mature squamous metaplastic cells with increased N/C ratio and engulfed poly's. The differential diagnosis includes a reactive process.

Slide 6: Tissue section showing mild dysplasia accompanied by koilocytic atypia.

Cytologic Diagnosis:

Specimen Adequacy: Satisfactory for evaluation Diagnostic Category: Atypical Squamous Cells of Undetermined Significance

Tissue Diagnosis:

Cervical biopsy: Mild dysplasia of the cervix (CIN I) with Koilocytic atypia.

The Ascus category is used when squamous cells have significantly enlarged nuclei, but have diagnostic cellular changes that quantitatively or qualitatively fall short of LSIL. Bethesda allows for a sub-category of "Atypical Metaplasia" when nuclear enlargement is approximately 1 1/2 to 2 times the area of a normal metaplastic nucleus or 2 1/2 to 3 times a normal intermediate cell nucleus. Variation in size and shape and binucleation may occur. Statistically the potential for SIL detection on follow up biopsy increases with a decrease in cytoplasmic maturity of the atypical squamous metaplastic cells present on the pap test, with the highest percentage being associated with HSIL.

References:

M.Ruhul Quddus. Atypical Squamous Metaplastic Cells: Reproducibility, Outcome, and Diagnostic Features on the Thin Prep Pap Test. *Cancer Cytopathology* Feb. 25, 2001. Vol. 93 Number 1

Kurman RJ, Solomon D. The Bethesda System For Reporting Cervical/Vaginal Cytologic Diagnoses, 1994:30-43