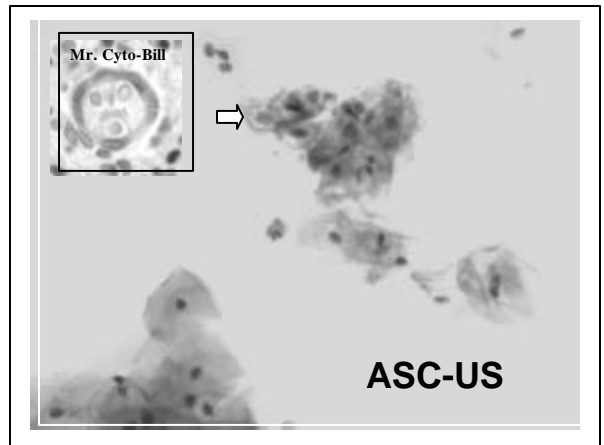


Update in Cytology Reporting: Cases Highlighting Bethesda 2001

Richard W. Lieberman, MD
<http://gynonc.path.med.umich.edu>

Update in Cytology Reporting

1



TBS 2001: Reporting "ASC"

- ASC: cytological changes suggestive of an intraepithelial lesion that are qualitatively or quantitatively insufficient to render a definitive interpretation
- ASC-US (undetermined significance)
- ASC-H (cannot exclude HSIL)

Update in Cytology Reporting

3

HPV testing: Impact of ALTS

"A"SCUS — "L" SIL "T"riage "S"tudy

...for all women with ASCUS, HPV testing identified virtually all (99.6%) with underlying abnormalities needing attention

Update in Cytology Reporting

4

Case Scenario One: ASC-H

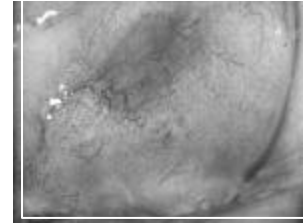
- 55yo post-menopausal female x5yrs
 - No HT
 - Routine annual HME
- PAP Smear
 - ASC, cannot exclude HSIL
 - Reflex HPV -DNA, negative

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5

Case One: Post-menopausal ASC-H

- Next step?
 - Colposcopic Examination
- Thin, erythematous
- No acetowhite changes
- T-Z?
 - Nowhere to be seen



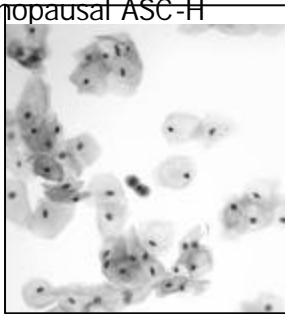
Assessment: generalized atrophy

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Case One: Post-menopausal ASC-H

- Why the "H"?
- Decreased E2
- Less maturation of squamous epithelium
 - Shift in maturation index
 - Parabasal cells may mimic HSIL



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Case One: Post-menopausal ASC-H

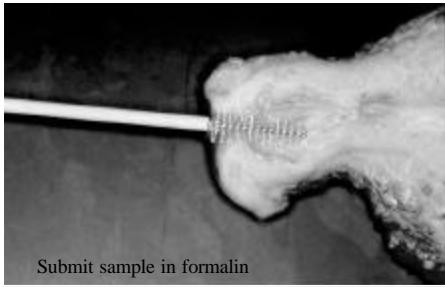
What else should be done?

- ECC?
 - ✓ optional
- ✓ Have the cytology reviewed
 - Second opinion
- Intravaginal estrogen, repeat cytology
 - Repeat cytology +/- HPV testing

Update in Cytology Reporting

8

ECC in Cervical Stenosis/Atrophy



Submit sample in formalin

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9

Case One: Post-menopausal ASC-H

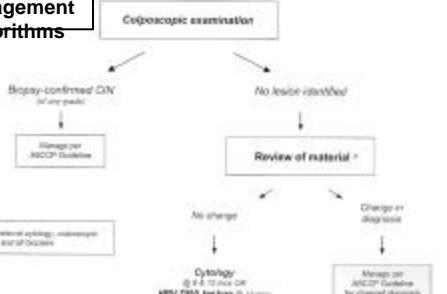
- Follow-up
 - Cytology remains ASC, HPV negative
 - over and over and over...
- Then what?!
 - Colposcopy
 - How often?
 - Cytology screening
 - How often?

Update in Cytology Reporting

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Management of Women with Atypical Squamous Cells: Cannot Exclude High-grade SIL (ASC-H)

ASCCP : Management Algorithms



Update in Cytology Reporting

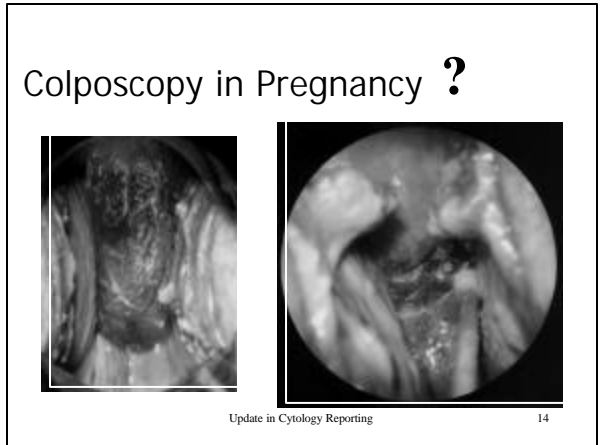
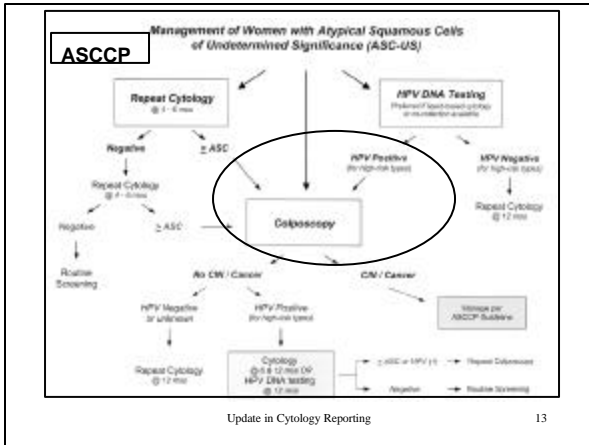
11

Case Scenario Two

- 30 year old gravida 3 para 2002
 - 24 weeks gestation
 - PAP: ASC-US
 - Reflex HPV
 - ✓ positive for high/intermediate risk subtypes
- no history of sexually transmitted disease

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Case Two: ASC-US in Pregnancy

Things to consider

- Exam can be limited
- Unique Findings
- *To biopsy or not to biopsy... that is the question!*

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Cervical Changes in Pregnancy

- estrogen-induced connective tissue proliferation
 - increased cervical edema
- increased vascularity
 - uterine blood flow at term = 500-650 ml/min
- endocervical gland hypertrophy and hyperplasia
 - marked eversion of the transformation zone (TZ)
- stromal decidualization

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Pregnancy Effects on Colposcopy

- immature sq. metaplasia → prominent acetowhite Δ's mosaic
- increased vascularity → confusing angioarchitecture
- decidualization → altered contour of the TZ
- vascular + decidual Δ's → mimics invasive carcinoma

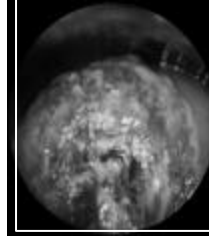
Obstet Gynecol Clin 20:153,1993

Update in Cytology Reporting

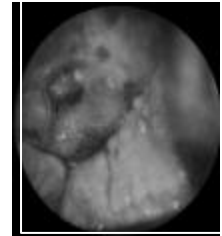
17

Decidual Changes

Diffuse, Cervical



Diffuse, Vaginal



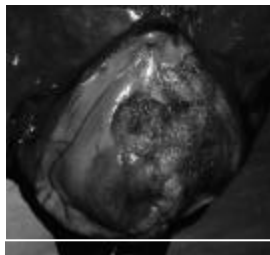
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Why Worry About These Patients?

Provider Issues

- risk of accelerated growth
 - theoretical "immune compromise"
 - not substantiated in the literature
- medicolegal
 - primum non nocere



Update in Cytology Reporting

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Abnormal Cervical Cytology in Pregnancy: Historical

- 1950's: Conization for repeated "dyskaryosis"
- 1960's: Random Four Quadrant Biopsy
- 1970's: Colposcopically Directed Cervical Biopsy
- 1980's: HPV and The Bethesda System

Update in Cytology Reporting

20

Cervical Neoplasia in Pregnancy: In Perspective

Obstet Gynecol 59:735,1982

- In-situ carcinoma: 1 per 770 pregnancies
- + Invasive carcinoma: 1 per 2200 pregnancies

Semin Oncol 16:417,1989

- Dysplasia (all types): 1 per 40 pregnancies
- In-situ carcinoma: 1 per 210 pregnancies

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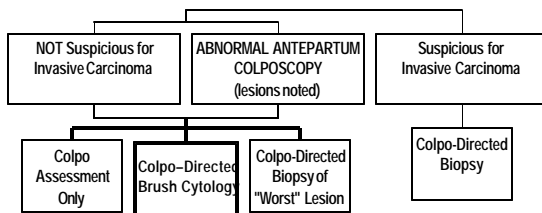
Colposcopy in Pregnancy

- large Graves speculum
 - vaginal sidewall retractors
- lots of Acetic Acid (3-5%)
- consult

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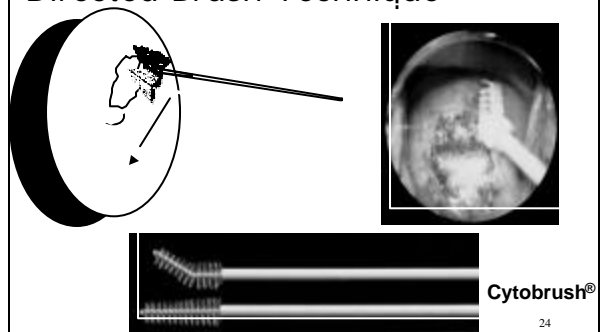
Algorithm for Colposcopy in Pregnancy



Update in Cytology Reporting

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Directed Brush Technique



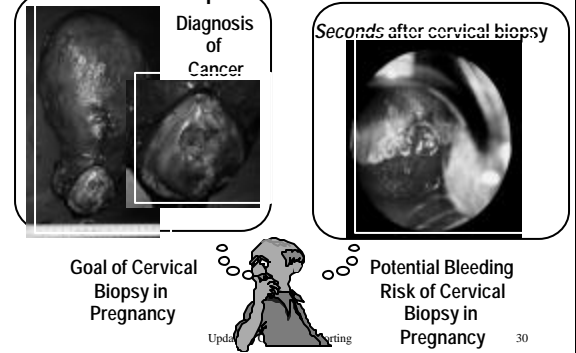
Cytobrush®

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Colposcopy in Pregnancy

- How often?
 - It depends...
- Follow-up
 - Cytology only vs.
 - Colposcopy at post-partum

Current Perspective



Thank you!

Colposcopy in Pregnancy: Directed Brush Cytology Compared with Cervical Biopsy.
Obstetrics and Gynecology, 94:198-203, August 1999.

<http://gynonc.path.med.umich.edu>