CERVICAL CANCER PREVENTION 2014

(WHAT HAVE THEY DONE TO MY PAP SMEAR NOW?!)

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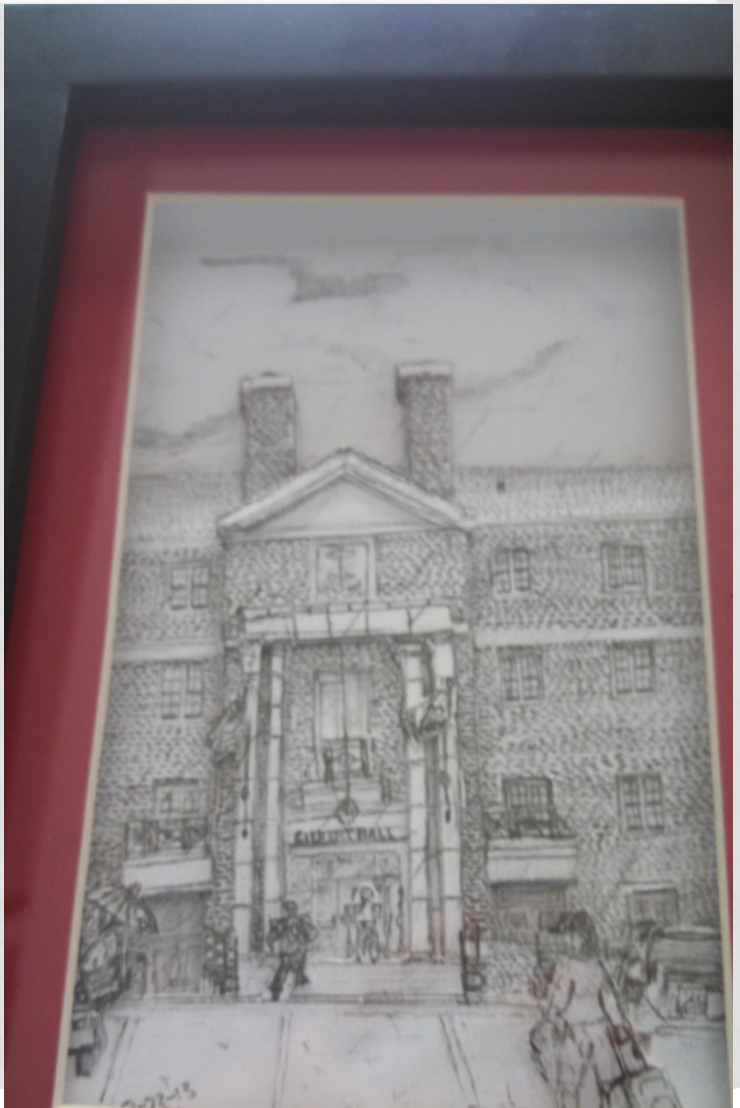
- I have NOTHING to disclose !



AIM OF DISCUSSION

- 1. General Concepts
- 2. Philosophy of Management
- 3. General Prospective for University Students
- 4. “Non Traditional Students”: ie Older Women

1957

- Best car we ever had: CHEVY BELAIR
- American Cancer Society Supports PAP Smear Testing.
- Cervical Cancer has declined by 80% in Fifty Years
  - The most successful Cancer prevention strategy in History

WHO IS DOING THIS TO US?!

- ASCCP American Society for Colposcopy and Cervical Pathology

- 2012 Consensus Conference

2012 Consensus Conference Participating Organizations

American Academy of Family Physicians
American Board of Pathology
American Cancer Society
American College Health Association
American College of Obstetricians & Gynecologists
American Society for Colposcopy and Cervical Pathology (ASCCP)
American Society for Cytopathology
Association of Reproductive Health Professionals
CDC - Division of Cancer Prevention and Control
CDC - Division of High-Consequence Pathogens and Pathology
CDC - Division of Laboratory Science & Standards

College of American Pathologists
Food & Drug Administration
International Federation for Cervical Pathology and Colposcopy
International Gynecologic Cancer Society
National Cancer Institute
Nurse Practitioners in Women's Health
Planned Parenthood Federation of America
Society of Canadian Colposcopists
Society of Gynecologic Oncologists
Society of Obstetricians and Gynaecologists of Canada
Women Veterans Health Strategic Healthcare Group

WHY ARE THEY DOING THIS TO US?

- Incidence of Cervical Cancer has steadily dropped.
- Overwhelmingly patients with Cervical Cancer are patients that have not had timely care at all.
- The trend for the last 30 years has been to manage more conservatively –less treatment has not resulted in poorer outcomes.
- Overtreatment may lead to other problems.

NOMENCLATURE

- Specimen Adequacy
- Squamous Cells --The body's tough covering
  - Like cells of one's skin or lip
  - Covers the outside of the Cervix
- Columnar Cells –The velvety tall thin cells
  - Lines the endocervix and endometrium
- The Squamocolumnar Junction
  - The border between the two cell types
  - Where the action is for dysplasia
- Cervical Intraepithelial Neoplasia
  - Long standing description of Dysplasia divided in to 3 types
    - It is losing favor --But still has its Proponents and Reasons

SPECIMEN ADEQUACY

- Having Both Squamous Cells and Endocervical (Columnar) implies a thorough specimen
- Been to both sides of the border!
- The lack of endocervical cells does not invalidate the predictability of a PAP smear in evaluating dysplasia.

WHAT DO YOU DO IF ENDOCERVICAL CELLS ARE NOT PRESENT?

Manage as you would when the cells ARE present.

Not to be confused with an unsatisfactory PAP smear:

- Insufficient Cells
- Cells excessively obscured

1976

- US Bicentennial
- Baumgarts get Married --Best Marriage we've ever had!
  - Has lasted way longer than the '57 Chevy
- HPV was Identified as a cause of Cervical Cancer by Zur Hausen , who awarded the 2008 Nobel Prize in Medicine for his Discovery

HUMAN PAPILLOMAVIRUS

- The Bad -- Anal and Genital tract Warts
  - Laryngeal polyps (Less common)
- The Worse -- Dysplasia
- The Ugly -- CANCER

DYSPLASIA –PRE CANCER

- Cervical Intraepithelial Neoplasia CIN
- Vaginal Intraepithelial Neoplasia VAIN
- Vulvar Intraepithelia Neoplasia VIN
- Anal Intraepithelial Neoplasia AIN

HPV & CANCER

- Cervix
- Vagina
- Vulva
- Anus
- Penis
- Oropharyngeal

HIGH RISK STRAINS OF HPV HR-HPV

- Types 16 and 18 – Baddest of the Bad
  - 70% of Cervical Cancer
  - 80% of Anal Cancer
  - 60% of Vaginal Cancer
  - 40% of Vulvar Cancers
- Others associated with Cervical Cancer:
  - 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68, 73, and 82
- Genital Warts
  - 6, 11, 42, 44

HPV AND SMOKING

- 1. How does the smoke get in there??!!
- 2. Doubles Risk
  - Abnormal PAP
  - CIN
  - Cancer

GARDASIL – HPV VACCINE

- Protection from Strains HPV-6 and HPV-11
  - Causes 90% of Genital Warts
- Protection from HPV-16 & HPV-18,
  - Does it make a difference? **Yeah!!**

- Small study: 250 patients seen for Colposcopy
  - No HPV Vaccination: 18% CIN II+
  - Vaccination after first Coitus 6%
  - Vaccination before Coitus 0%

- Does it change how frequently you do PAP smears?
- **NO!**

MORE NOMENCLATURE

- Atypical Squamous Cells of Undetermined Significance (ASC-US)
  - Cellular atypia but not dysplasia -- “Pre-Pre-Cancer”
- Low Grade Squamous Intra-Epithelial Lesion (LSIL)
  - Equivalent with CIN I
- High Grade Squamous intra-Epithelial Lesion (HSIL)
  - Equivalent with CIN II and CIN III
- In an effort to Standardize Nomenclature The “CIN” Description is getting pushed out
  - It still has some usefulness though

MANAGEMENT OF CERVICAL SCREENING

- In the United States each year there are about 14 cases of Cervical Cancer in women 19 y/o and less.
  - Very Very Rare, 1 -2 cases per million.
  - Frequently unrelated to HPV
  - To put it into perspective, How many other diseases do we screen for with a similar risk?
- Incidence of Cervical Cancer in Women 19 – 25 y/o
  - 1.5 per 100,000
  - Calculated cost to use traditional screening protocols to find a case of cervical cancer in these women:
  - $3,285,500 per case found.

ROUTINE PATIENTS

- First PAP at age 21
- If first PAP is Normal: Repeat every 3 years
- Protocol does not apply to immune suppressed, Especially HIV positive patients.

- The vast majority of University Students will have One PAP smear in their collegiate career; Two if they go to Grad school

MANAGING ABNORMAL PAP SMEARS IN PATIENTS UNDER AGE 25

- ASC-US
  - Reflux to HPV Preferred by ASCCP

    If ASC-US is HPV Negative Repeat PAP in 3 years
  - Repeat PAP in 1 Year –Adequate by ASCCP
    - (--Preferred by Dr. Baumgart!)

- LSIL
  - Repeat in One Year! --No Colposcopy!!!

- ASC-US H or HSIL
  - Colposcopy

ATYPICAL GLANDULAR CELLS

- Now called AGC (not AGUS)
  - Sounded too much like ASCUS
  - It is a completely different beast.
- Management
  - Colposcopy
  - Endocervical Biopsy (ECC)
  - Endometrial Biopsy

MANAGEMENT OF LSIL PAP, PATIENT UNDER AGE 25

- If first abnormal PAP is LSIL, Repeat PAP in 1 year
- If second PAP is Normal ASC-US or LSIL, Repeat PAP in 1 year --AGAIN!
- If third PAP is ASC-US or LSIL: COLPOSCOPY
- If third PAP is normal Revert to 3 year screening

MANAGEMENT OF ASC-H OR HSIL PAP, PATIENT UNDER AGE 25

- Colposcopy
  - If CIN I or Negative – Colp and PAP every 6 mo for 24 mo
  - If CIN II+ --to follow

IF COLPOSCOPY SHOWS CIN II OR III WHAT TO DO?

- 1. Colposcopy was satisfactorily performed (Borders of Lesion observed and S-C Junction observed:
- 2. Patient still has desire/potential for future pregnancy:
  - Can manage conservatively and closely with Colposcopy every 6 months for up to 2 years. Treat if persistent.
  - CIN 2 has a higher chance of regressing to negative than progressing to CIN 3.
  - Conservative management of CIN 3 –more controversial
- 3. If fertility is not an issue -- Treat

MANAGING PATIENTS OVER 30: (RECENT REPORTS HAS SPOTTED THEM ON CAMPUS!)

- PAP testing every 3 years if:
  - Negative History for CIN I or 3 Consecutive Normal PAPS
  - Negative History for CIN II or greater (CIN II+)
  - HIV Negative, not Immunocompromised
  - Not DES exposed in utero

CO-TESTING

- For women 30 – 65 Co-testing with Cytology(PAP) AND HR-HPV testing every 5 years is preferred.
- PAP smear alone every 3 years is still acceptable.

- These Protocols exclude women:
  - History of CIN II+
  - HIV positive or immunocompromised
  - DES exposure in utero

WHY IS CO-TESTING BETTER?

- More sensitive than PAP smears
- Detects threat earlier
- Especially Sensitive to Adenocarcinomas of Cervix
  - (PAP smears are not)

WHAT TO DO WITH POSITIVE HPV WHEN PAP SMEAR IS NEGATIVE

- Repeat both tests in one year
  - Do Colposcopy if HPV is still positive or for PAP LSIL+

WHEN TO STOP TESTING

- 1. After age 65
- 2. No evidence of CIN II+ in past 20 years
- 3. Prior Negative Screening
  - Three consecutive Negative PAPs or
  - Two consecutive Negative Co-tests
- 4. A negative test in past 5 years

HYSTERECTOMY

- Discontinue PAP smears if:
  - Cervix was removed (They aren't always)
  - Never had CIN II+
- Following Hysterectomy with a History of CIN II+
  - Continue age based screening for twenty years

PATIENT COMPLIANCE AND ACCESS TO CARE

- The key to success in all these protocols is keeping the patients in the protocol.
- There are two Huge confounding factors:
  - 1. Students as patients
    - Many students are managing their own health for the first time ever. Not all manage this responsibility well.
    - Because of the sexual nature of genital disease students may be reluctant to seek out their usual support systems (Like Mom)
  - 2. A healthcare system that does not guarantee access through out the span of their follow-up.

HOW TO DEAL WITH PATIENT COMPLIANCE AND ACCESS TO CARE

- Individualize Care to the patient and the situation.
- Take advantage of electronic reminders in your EMR – Did they show-up for their 1 year f/u PAP?
- If patient is leaving your institution make a simple clear and concise plan of their next step in care.
- Might a senior/departing student do well to have a 6mo f/u while she still has access? No algorhythm for that.
- Don't Over manage
- Don't Over treat
- But Don't Overlook!

RESOURCES

- ASCCP Concensus Algorythms
- Go to asccp.org
- Click on “Updated Guidelines”