CERVICAL CANCER SCREENING IN KUMASI, GHANA

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International Healthcare Volunteers
• Established in 2001
• Not-for-profit organization
• Provides healthcare to women in underserved areas
• Provides continuing medical education to healthcare professionals in these areas

Cervical Cancer
• Worldwide, third most common cancer in women
• Almost always caused by high-risk Human Papilloma Virus (HPV) infections
• HPV types 16 and 18 considered high-risk
• Gardasil® vaccine protects against 6, 11, 16, and 18
• Develops very slowly
• Early cervical cancer is usually asymptomatic
• Dysplasia, precancerous cells, can be detected by a pap smear and is treatable

Cervical Cancer Screening in the US
• Pap smear every 2 years starting at age 21
• Reflex HPV testing for ASC-US
• Colposcopy if high-risk HPV +
• Automatic colposcopy for ASC-H, LSIL, or HSIL

Cervical Cancer Screening in Ghana
• Initiated in 2008
• Visual inspection with acetic acid (VIA)
• HPV assay if available
• Colposcopy for + VIA (acetowhite changes)

Colposcopy
• Signs of angiogenesis – acetowhite changes, hairpin vessels, punctation

2011 Screening Data
Kumasi, Ghana
• 3 medical professionals trained in VIA and colposcopy
• 11 women screened with VIA, HPV assay
• 1 colposcopy performed

HPV Assay – 2009-2010 Results
• 20 of 132 specimens (15.2%) were high-risk HPV +
• 10 of the 20 were probed for HPV types 16 and 18
  • 1 was HPV 16 +
  • 0 were HPV 18 +

Ghana and Cervical Cancer
• 6.57 million women ages 15 years and older at risk of developing cervical cancer
• 1st most frequent cancer among women in Ghana
• Every year 3038 women are diagnosed with cervical cancer and 2006 (2/3 of those diagnosed) die from the disease
• In Western Africa, about 21.5% of women in the general population are estimated to harbor cervical HPV infection at a given time (1)

Summary
• Cervical cancer is a preventable disease
• Sustainable screening programs are necessary in Ghana and other developing countries
• Types of high-risk HPV may vary worldwide
• Knowledge of prevalent HPV types will allow for development of effective vaccines

References and Thanks

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