Primary Care for the HIV Provider

November 2009

Component	Timing
General Health	
Complete history	Update annually
Complete physical exam	Annually
Risk assessment – tobacco use, alcohol use, illicit drug use, sexual activity, domestic violence, support systems	Update annually and brief risk assessment at each visit for ongoing appropriate screening and risk reduction counseling
Dental exam	Every 6 months
Opthalmologic exam	Annually by eye care specialist, every 6-12 months if CD4+ T cell count < 50 cells/mm^3
Blood pressure	Annually
Colon cancer screening [1]	Begin at age 50 or earlier with strong family history.
Fasting glucose [2]	Initially, before starting antiretroviral therapy (ART) and then annually. May consider more frequent screening for high risk
Fasting lipids	Annually after age 35 if not on ART, every 6-12 months on ART; consider testing 1-3 months after starting or modifying ART
Tuberculosis screening[3]	Test at initial visit and retest if indicated
Viral hepatitis screening (hepatitis A, hepatitis B, and hepatitis C)	Initially and consider hepatitis C screening annually for high risk
Sexually transmitted disease screening (chlamydia, gonorrhea, syphilis)	Annually or more frequently for high risk
Depression screening	Annually and more frequently for high risk
Advanced directives	Annually
Diet and exercise	Every 6 months
Bone densitometry	Baseline in postmenopausal women ≥ 65 years old or younger with 1 or more risk factor(s); consider in persons ≥ 50 years old if they have ≥ 1 risk factor(s) for premature bone loss. Although screening in men can be considered, there are currently no consensus statements on utility.
Genital and anal-rectal exam	Annually with physical. All patients should have digital rectal exam. Anal cytology ("anal Pap") is considered controversial, but may be performed if appropriate follow up systems are available.
Women's Health	
Cervical Pap and pelvic exam[4]	Every 6 months, annually after 2 consecutive negative paps
Clinical breast exam	Annually with physical
Mammogram	Annually after age 40
Discussion regarding hormone replacement therapy[5]	Perimenopausal women
Men's Health	
Prostate exam	Consider annually in all men. Testing at an earlier age may be advisable in men at higher risk of prostate cancer (e.g., African Americans and those with family history).
Prostate-specific antigen[6]	Consider annually in men aged ≥ 50 years. Discuss pros and cons with patient.
Abdominal ultrasonography for abdominal aortic aneurysm	Once in men aged 65-75 years who have ever smoked

Immunizations		
Vaccine	**Timing**	**Comments**
Hepatitis A (HAV)*	2 injections at 0 and 6-18 months; or 3-4 injections when administered as a combined hepatitis A/B vaccine	If HAV antibody negative
Hepatitis B (HBV)*	3 injections at 0, 1, and 6 months. Also available in a combined hepatitis A/B vaccine that can be administered as 3-4 doses	If HBV antibody negative. Screening for HBV should include HBV surface antibody, HBV core antibody, and HBV surface antigen.
Influenza	Annually	Use injectable only
Pneumococcal polysaccharide	Baseline with consideration for booster at 5 years	Pneumococcal vaccination is indicated in all persons with HIV infection. Although guidelines vary, all suggest at least one additional booster in 5 years.
Tetanus/Pertussis (Tdap) Tetanus (Td)	Every 10 years	Tdap recommended for booster in persons < 65 years old; Td for ≥ 65 years of age
Varicella (primary)	2 doses 3 months apart	CD4+ T cell count > 200 cells/mm^3 who do not have evidence of immunity to varicella
Human papillomavirus (HPV)	3 dose series given at 0, 2, and 6 months	Ideally given prior to any sexual activity. Gardasil HPV vaccine approved for females and males ages 9-26. Safety and immunogenicity studies in those with HIV infection are ongoing.
Haemophilus influenza type B	One time dose	Administer to asplenic patients and those with history of recurrent Haemophilus infection
Polio	3 doses over 6-12 months for primary immunization	OPV contraindicated. IPV should be given if indicated.

*For both hepatitis A and B, revaccination recommended if patient remains antibody negative after the primary series.

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Footnotes

1. The U.S. Preventive Services Task Force recommends screening for colorectal cancer with one of the following:
    a. Annual high sensitivity fecal occult blood test (FOBT)
    b. Sigmoidoscopy every 5 years.
    c. Sigmoidoscopy every 5 years with high sensitivity FOBT every 3 years.
    d. Colonoscopy every 10 years.

    Abnormal tests should be followed up with a colonoscopy. May consider beginning screening earlier and more often in patients with a personal or strong family history of colorectal cancer or polyps.

2. Fasting blood glucose is the recommended test; however, random plasma glucose is an alternative. Any abnormal results should be confirmed with a fasting blood glucose or oral glucose tolerance test.

3. Persons at high risk for exposure to tuberculosis should be screened annually. Either tuberculin skin test or interferon-gamma release assay is acceptable. Persons with an initial negative test, who experience a subsequent increase in CD4+ T cell count due to ART should be retested as well.

4. Cervical pap smears can be done using conventional or liquid based cytology. One advantage of liquid based cytology is the ability to do reflex human papilloma virus (HPV) testing.

5. Short-term hormone replacement therapy (HRT) is appropriate for the relief of severe menopausal symptoms except in cases with a history or high risk of breast cancer, heart disease, venous thromboembolic event, or stroke. Women with a uterus should be given estrogen and progesterone, rather than estrogen alone. For some women, HRT can increase the risk of breast cancer, stroke, and heart disease. If HRT is to be used, it should be used for a limited period of time at the lowest effective dose. Diet, exercise, and other lifestyle interventions should be implemented as well.

6. Prostate-specific antigen should not be drawn after a digital rectal exam because it may cause a false positive result. Risk factors include age 50 years or greater, certain ethnicities (African Americans are at increased risk), family history (1st degree relative), and certain dietary factors such as increased consumption of animal fat.

SOURCES

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