

Initial Evaluation of Patient with New HIV Diagnosis

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Educational Objectives

1. Prioritize the initial evaluation and management considerations for a patient with a new HIV diagnosis
2. Identify the relevant aspects of the medical history
3. Identify diagnostic and screening tests necessary in the initial evaluation
4. Identify any necessary opportunistic infection prophylaxis necessary based on patient's initial CD4+ cell count

Case One

Acute HIV

SM is a 23 year old young man who presents to you complaining of fatigue and muscle aches for the last two weeks. Over the last few days, he has also noticed an erythematous, flat confluent rash on his chest and extremities. His vital signs are notable for a fever to 101^o. On exam, you appreciate a single buccal mucocutaneous lesion, and some shotty cervical lymphadenopathy. The remainder of his exam is benign. His workup is notable for a positive HIV-1 4th generation test CD4 count is 645 cell and HIV viral load (VL) is 2.5 million copies.

What is the natural history of HIV infection?

What kinds of questions would you ask patient about how they are feeling regarding their diagnosis?

What is partner notification?

What specific questions related to the patient's past medical history are you interested in?

Numerous medications interact with antiretroviral therapy, particularly those that are metabolized by the cytochrome p450 system. What specific medications are you interested in?

Case Two

CV is a 26 yo healthy female who presents to see you for her annual physical. She is found to be HIV positive during routine STI screening testing. Her only risk factors are heterosexual contact. Her physical exam is unremarkable. What initial tests would you order for her?

What is the initial laboratory work-up for initial HIV?

Her Hepatitis B serologies return as follows: HBcAb positive, HBsAb positive, HBsAg negative. Based on the information you obtain from Hepatitis serologies, what can you surmise and what would you like to do?

CV's G6PD testing returns back showing that she has a deficiency in G6PD. Which drugs commonly used in HIV patients for treatment of various conditions will be unable to be used in Ms CV?

What basic initial considerations should be taken into consideration when choosing a treatment regimen?

Which immunizations would you recommend for this patient?

Case Three

AIDS

Mr. LM is a 62 yo MSM who presents with fatigue. He also reports a dry cough, 3 months of unintentional weight loss and drenching night sweats. His physical exam is remarkable for decreased breath sounds in the R lung field. His CD4+ returns at 120 cells and HIV VL is 120,000 copies.

What are the primary OI prophylaxes and at what CD4 counts would you initiate them?

When should we start ART?

Primary References

Human immunodeficiency virus (HIV) viremia and CD4 lymphocyte counts during acute infection.

Adapted from Pantaleo G, Graziosi C, Fauci AS. New concepts in the immunopathogenesis of human immunodeficiency virus infection. N Engl J Med. 1993;328(5):327–335.

Aberg JA et al. Primary care guidelines for the management of persons infected with HIV: 2013 update by the HIV Medicine Association of the Infectious Diseases Society of America. *CID*. 2013.

Chu C and Selwyn PA. Diagnosis and initial management of acute HIV infection. *Am Fam Physician*. 2010. 15;81(10):1239-1244.

Hammer SM. Management of newly diagnosed HIV infection. *N Engl J Med*. 2005. 353:1702-10.