

# **The Initial Encounter**

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# **Disclosure of Financial Relationships**

**This speaker has no significant financial relationships with commercial entities to disclose.**

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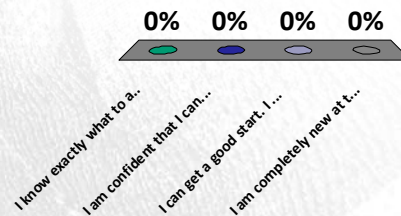
## Case Presentation

- **A 28 yo MSM presents for care at your clinic, referred from an std clinic after testing positive for HIV**
- **He presented for free testing that was offered as a promotion for World AIDS Day.**
- **What's next?**



## What do we do next?

1. I know exactly what to ask and what to do.
2. I am confident that I can address most of the issues with this patient.
3. I can get a good start. I have good resources for any questions I might have.
4. I am completely new at this.



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## What does he know about HIV?

- **HIV is no longer a 'death sentence'**
  - Diabetes mellitus can be a useful analogy
    - Chronic, incurable disease
    - Not immediately fatal
    - Eventually requires medications in most cases
    - Can usually be controlled with careful adherence, management, and follow-up
    - As with the care of persons with diabetes, working in a team and providing continuing education is essential throughout the course of the disease
- **Patients educated about HIV and the potential for resistance have better adherence to therapy<sup>1,2</sup>**

1. Malow RW, et al. Alcohol Drug Abuse 1998;49:1021-4.

2. Tuldra A, et al. 39th Interscience Conference on Antimicrobial Agents and Chemotherapy; 1999; Abstract 595.

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## What else?

- **General future expectation**
- **Outline plan**
- **Listen, observe, assess suicide risk**
- **Social/Mental Health linkage**

## Social/Mental Health Linkage

- **Housing Opportunities for Persons with AIDS (HOPWA)**
- **AIDS Drug Assistance Program (ADAP)**
- **Ryan White Medical Services: dental, mental health, specialty care (varies by area)**
- **AIDS Insurance continuation program (AICP)**

## Case Managers Play Important Role



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## Set Goals

- **Where do you want to be in 10 years?**
- **Where do you want to be in 20 years?**
- **Where do you want to be in 30 years?**

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## Case Presentation continued

- **How is he coping with the diagnosis?**

**Common responses :**

- "I've tried not to think about it, ever since I found out"
- "I've watched so many friends die, and now I'm next"
- "My friends tell me there's medicine for it and it's not that big a deal"
- I don't want to die; how much time do I have left?

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## Case Presentation continued

- **Ask about sources of social support**
  - Friends, family
  - Community organizations
- **Offer counseling**

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## How and when did he contract HIV?

- **What are his risk factors for acquiring HIV?**
  - He has been using marijuana socially for the past 10 years. History of crack use, last used 6 months ago.
  - He also admits to unprotected sex with drug use; 30 casual partners in the last 5 years; 3 partners within the last year
  - He does not know when he might have contracted HIV; this was his first HIV test
- **Risk factor identification can guide counseling and prevention**

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## Risk factor identification can guide counseling and prevention



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## Why do we care about when he contracted his HIV?



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- **Resistance**
  - Increasing transmission of drug-resistant HIV strains
  - Resistance testing generally indicated for patients infected within the past 2-3 years, even if antiretroviral therapy is not being considered in the near future (ability of currently available resistance assays to detect resistance wanes with time)
- **Primary HIV Infection (PHI)**
  - Loss of HIV-specific CD4 cells occurs immediately after PHI

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Liszewicz J et al. N Engl J Med 1999;340:1683.

Walker BD. Nature 2000;407:313-4.

## Past Medical History

- **Crack cocaine until 6 months ago; marijuana socially; no history of treatment**
- **No other recreational drug use, no ETOH**
- **Denies tobacco use**
- **Depression, insomnia**
- **Hospitalized for overdose secondary to suicide attempt, 2000**
- **No established primary care provider**

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## Medications

- Sertraline 100mg QAM
- Trazodone 50mg 1 tab QHS prn

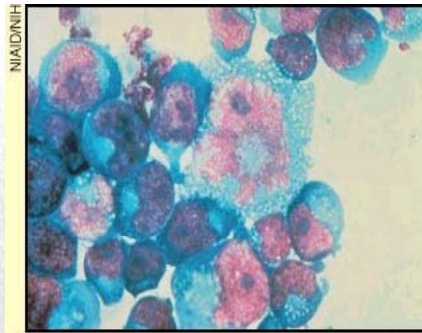
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## HIV 101 for Patients

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## How does HIV cause AIDS?

- HIV infects and destroys an important type of cell in the body's immune system known as the T-helper ( $T_H$ ) cell, also known as the  $CD_4$  cell



T cells infected with HIV.

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## How does HIV cause AIDS?

- $CD_4$  cells direct and coordinate other cells in the immune system to battle infections
- When  $CD_4$  cells are destroyed, the body loses its ability to fight off infections

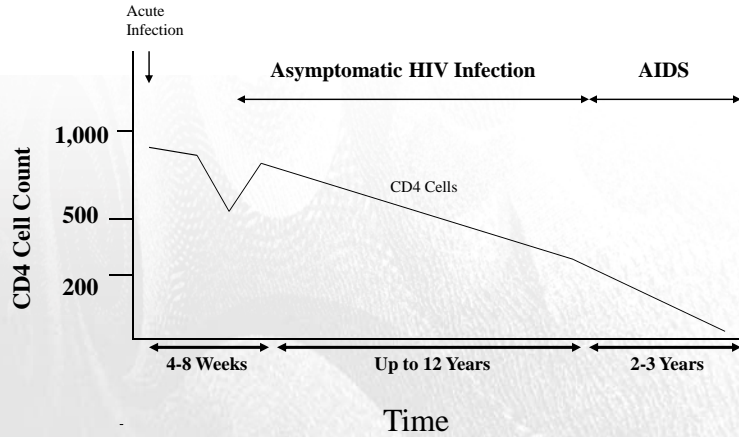


(Photo by Wes Anderson)

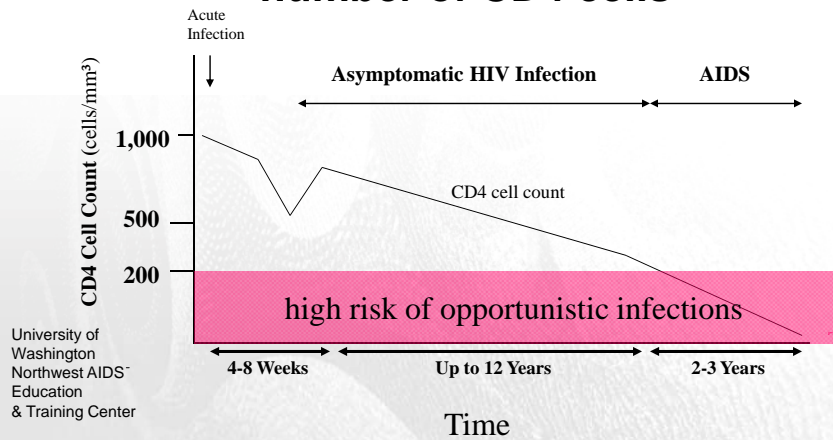
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### HIV Infection is characterized by a steady decline in the number of CD4 cells



### HIV Infection is characterized by a steady decline in the number of CD4 cells



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## How does HIV cause AIDS?

- Infections that develop as a result of HIV-inflicted damage to the immune system are called “opportunistic infections” or “OIs”
- When someone with HIV develops an opportunistic infection, they are diagnosed with AIDS



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## AIDS Definition continued

- CD4 drops below 200
- CD4 % below 14%

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## How does HIV cause AIDS?

- Over 20 years ago, virtually all patients diagnosed with AIDS died within a few years
- Currently, with treatment, many patients diagnosed with AIDS are surviving many years with the disease



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## What is the “Viral Load”?

- The HIV viral load is simply a measure of the quantity of HIV in a drop (mL) of a patient’s blood, and it is usually measured in copies/mL
- In general, the higher the viral load, the faster CD4 cells are destroyed



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## Evaluation of the Patient



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## DHHS Guidelines

- **Lab staging of the disease:**
  - VL – quantitate the viral burden
  - CD4 – measure of immune function
- **Other lab studies:**
  - CBC – anemia, thrombocytopenia common
  - LFTs – baseline for later Rx
  - RPR – one STD (HIV), may be others, and syphilis may progress rapidly in HIV
  - Hep A, B, C serologies – may need to vax or Rx – hep C accelerated with concurrent HIV, major cause of death
  - Toxo IgG – re risk if low CD4 (<100), need for prophylaxis
  - GC/Chlam

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## Evaluation of the Patient DHHS Guidelines

- Resistance testing
- Fasting lipids
- Fasting glucose
- Urinalysis
- Urine for GC/Chlam

Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. November 3, 2008; 1-139. Available at <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>  
Accessed (April 1, 2009) page 4.

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## Optional:

- G6PD
- CMV IgG
- Toxo IgG

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## Evaluation of the Patient

- **History**
  - HIV-associated symptoms – if present, indication for Rx
    - fatigue, intermittent fevers, diarrhea, or night sweats, oral lesions, rashes, adenopathy
    - hx of OIs (explore possible mis-diagnoses)
  - Co-existing conditions and meds (incl OTC)
  - Fam Hx – especially DM, HBP, heart Dz, Ca, blood dyscrasias
  - SHx – travel, pets, vax Hx, water source, sexual orientation and practices (re HIV risk), drug use, family and personal supports, HIV knowledge base
  - Thorough ROS for baseline



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## Evaluation of the Patient

- **PPD - > 5mm induration is positive in HIV**
- **CXR – if +PPD or symptomatic**
- **Pap smear**
  - In females, especially if none in past year
  - Consider rectal Pap if sexual practices include receptive anal intercourse (both sexes, especially if multiple partners, genital warts on exam)



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## Guidelines for Initiating ART: Chronic Infection

Clinical Category or CD4 Count	Recommendation
<ul style="list-style-type: none"> <li>•History of AIDS-defining illness</li> <li>•CD4 count &lt;350 cells/<math>\mu</math>L</li> <li>•Pregnant women</li> <li>•HIV-associated nephropathy</li> <li>•Hepatitis B coinfection, when HBV treatment is indicated*</li> </ul>	<p><b>Initiate ART</b></p>

\*Treatment with fully suppressive drugs active against both HIV and HBV is recommended.

Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. November 3, 2008; 1-139. Available at <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>  
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## Guidelines for Initiating ART: Chronic Infection (2)

Clinical Category or CD4 Count	Recommendation
<p><b>CD4 count of &gt;350 cells/mm<sup>3</sup>, asymptomatic, without conditions listed above</b></p>	<p><b>Optimal time to initiate ART is not well defined. Consider individual patient characteristics and comorbidities</b></p>

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- **Rarely Urgency for ARV treatment**
- **Know sources for assistance**
  - Florida/Caribbean AETC ([www.fcaetc.org](http://www.fcaetc.org))
  - <http://www.aidsetc.org>
  - <http://www.aidsinfo.nih.gov>

## **Social History**

- Single, no children
- Born & raised in Texas but has lived in Florida for past 3 years; has lived in Chicago and Los Angeles
- Estranged from family but many friends; close with partner and his family
- Works in a retail supermarket

## Review of systems

- Lost 50# in the past 5 months
- Decreased appetite
- Night sweats
- Feelings of sadness, depression
- No suicidal ideations
- Has hope for the future

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## Physical exam

- Weight 178#, Height 5'7", Temp: 98.4 F
- B/P: 116/76, Pulse: 68 bpm, Resp: 20
- AAx3; WD; HEENT: WNL; Heart: RRR, S1S2; Lungs: CTAB; ABD: BS present X 4 quadrants; No lymphadenopathy; Neuro: nonfocal
- Genital: significant for perianal lesion about 2cm diameter, flat, well defined dry, scaly borders, mild erythema, no d/c

## Info we already have:

### Labs:

- Hep A IgG: Positive
- Hep BsAg: Neg
- Hep BsAb: Neg
- Hep BcIgG: Neg
- Hep C Ab: Neg
- RPR: NR
- GC/Chlam: Neg

### What does it mean:

- Past resolved Hep A
- No immunity to Hep B, needs vaccine
- No hx of hep C, educate re: risk factors

## Ordered this visit

- Continue mental health visits
- Nutritionist referral
- Anal Cytology
- Hep B series
- PPD placement
- Nystatin/triamcinolone cream to affected area as directed

## Ordered this visit:

- CD4
  - CBC
  - HIV VL
  - CMP
  - HIV genotype
  - Toxo IgG
  - CXR
  - Outreach/counseling referral
- Optional:**
- HLA-B5701
  - G6PD
  - CMV IgG

## 3-4 Weeks Later:

- CD4: 506
- CD4%: 33.7
- VL: 14,320, log: 4.156
- CBC: WNL
- CMP: WNL
- CXR: neg
- PPD: neg
- Anal cytology: neg
- Lesion resolved
- Repeat CD4 and VL for trend
- Continue outreach counseling

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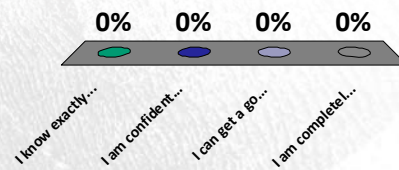
## Three months later:

- CD4: 688
- CD4 %: 35.6
- VL: 3250
- Log VL: 3.512
- He has completed counseling sessions
- Continues sertraline and trazodone although he wants to stop

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## What level are you now?

1. I know exactly what to ask and what to do.
2. I am confident that I can address most of the issues with this patient.
3. I can get a good start. I have good resources for any questions I might have.
4. I am completely new at this.



## Summary

- Living well with HIV off meds
- Continue periodic monitoring of CD4 and VL

