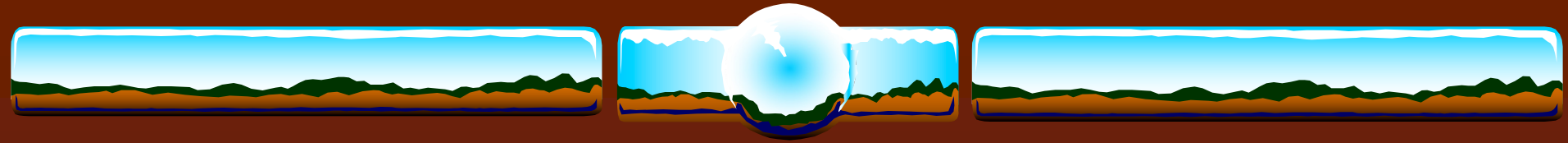


# IHS HIV Primary Care

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**Jonathan Vilasier Iralu, MD, MACP, FIDSA**  
**Indian Health Service**  
**Chief Clinical Consultant for**  
**Infectious Diseases**



# Disclosures



**INDIAN HEALTH SERVICE**

## **HIV Primary Care Treatment Guidelines for Adults and Adolescents**

### **PREPARED BY:**

**Jonathan Vilasier Iralu, MD, FACP, AAHIVS**  
Chief Clinical Consultant for Infectious Diseases  
Indian Health Service

**Rick Haverkate, MPH**  
National HIV/HCV Program Coordinator  
Indian Health Service

**Alessandra Angelino, MD, MPH**  
University of North Carolina – Chapel Hill

**LCDR Paul Bloomquist, MD**  
Chief, Centers of Excellence  
Phoenix Indian Medical Center  
Indian Health Service



# Presentation

- A 42-year-old male teacher presents to the clinic for a blood pressure check after a recent emergency room visit for an ankle sprain. He feels well today and would like to establish primary care. You order a lipid panel, HgbA1c, Hepatitis C serology and fourth generation HIV test. The HIV test comes back positive.

What do you do now??



## First visit goals

- ❖ Get to know the patient at the first visit
  - ❖ Spend most of that visit explaining the basics
  - ❖ Focus on the ease and effectiveness of modern treatment
  - ❖ Show that you care!
- ❖ Work to destigmatize HIV and normalize HIV care
- ❖ Connect the patient to your treatment team the same day



COMPASSION is the essential

“the secret of the care of the patient is in caring for the patient”

— Dr. Francis Peabody

# History

- Current symptoms
- Risk factor screening
- Sexual history
- Psychiatric history
- Substance Use
- Social: supports, employment, housing, incarceration history
- Domestic violence

# Physical Exam

- Lymphadenopathy
  - Cervical
  - Epitrochlear
- Oral Hairy Leukoplakia
- Oral Thrush
- Cotton Wool Spots
- Splenomegaly
- Rashes
  - Acute HIV rash
  - Syphilis



# Oral Hairy Leukoplakia



# Cotton Wool Spots



# Acute HIV Rash



# Rash of Secondary Syphilis Papular Form

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# What Labs and Studies to Order...

- ❖ The **Big Three** for staging purposes
- ❖ The **co-infection** labs and x-rays
- ❖ The **special cancer** tests
- ❖ The **pre-drug treatment** tests
- ❖ **Basic Primary Care** tests

# The Big Three

<b>CD4 Count</b>	<ul style="list-style-type: none"><li>• At diagnosis, then 3 months after starting ART then ever 3-6 months for two years.</li><li>• After 2 years of virological suppression, monitor CD4 count when<ul style="list-style-type: none"><li>• If CD4 &lt; 300, monitor VL every 3-6 months</li><li>• If CD4 300-500, every year.</li><li>• If CD4 &gt; 500, monitoring is optional.</li></ul></li></ul>	Use one laboratory and methodology  <b>CD4 monitoring is indicated at any time there is loss of virological control.</b>
<b>HIV Viral Load</b>	At diagnosis & q 3-6 months. Measure every 6 months after suppressed and CD4 stable	Use one laboratory and methodology
<b>Genotypic antiretroviral resistance test</b>	At diagnosis on all patients and with failure of virologic control	Test prior to starting antiretroviral therapy on all patients: NRTI, NNRTI, PI

# The Co-infection labs

RPR or T. pallidum EIA	At diagnosis and yearly	LP if evidence for neuro/ocular syphilis
GC/Chlamydia NAAT	At diagnosis and yearly Consider q 3-6-month test if ongoing STI risk	Order rectal & pharyngeal test if at risk, in addition to urine
IGRA assay or PPD	At diagnosis and yearly	<b>CXR if positive</b>
Hep A tot Ab HBsAg, HBsAb HCV Ab	Once for all patients. Test MSM, transgender women and PWID annually for Hepatitis B and C	Vaccinate for Hep A if serology is negative. Vaccinate for Hep B if no prior infection or vaccination
Toxoplasma Ab	Once	Prophylaxis if CD4<100
CMV Ab	Once	Test only if low risk (non-MSM/transgender/PWID)
Varicella Ab	Once if no h/o Chickenpox or Shingles	Consider vaccination if negative and CD4>200
Trichomonas vaginalis	Screen women at entry to care and annually	

# The Special Cancer tests

<b>Cervical PAP Smear</b>	If < 30, PAP yearly x 3 then if (-) q 3 years	If age $\geq$ 30 PAP/HPV co-test every three years
<b>Anal PAP Smear</b>	Anal cytology annually or if positive cervical PAP	Refer positives for high resolution anoscopy/surgery clinic





# Pre-treatment labs

G-6-PD Level	Once	If sulfa allergic
HLA B*5701 assay	Once if considering ART that includes Abacavir	Used to detect risk for Abacavir hypersensitivity

# Baseline Laboratory Testing

CXR	Once	Only if symptoms or PPD+
Pregnancy test	Once and with med changes or STI diagnoses	
Lipids	Baseline and annually	Avoid simva/lovastatin
Urinalysis	Baseline and annually if at risk for renal disease	
HGB A1c/fasting glucose	Baseline and annually	Fasting glucose is more accurate for diagnosing DM in HIV (+) persons
G-6-PD Level	Once	If sulfa allergic

## The story continues...

- The returns and feels well. He confided in a close friend and feels more confident and at peace today.
- He is found to have a **CD4 count of 187** and **HIV viral load of 4,311**. The screening tests for co-infection are all negative. You are planning the cancer screens for a later visit.

# The Three questions for today...

When should you start therapy?

What drug should you start?

Why should you start therapy?

# When should you treat?

Treat all HIV positive patients  
regardless of CD4 count  
**As Soon As Possible**

# What Drugs should you start?

## DHHS guidance

Tenofovir/Emtricitabine/Bictegravir 1 po daily

Or

Tenofovir + (Emtricitabine or Lamivudine) +Dolutegravir  
daily

Or

Abacavir/Lamivudine/Dolutegravir 1 po daily  
(if HLA B\*5701 (-) and HBV negative)

Or

Dolutegravir/Lamivudine 1 po daily  
(if HIV VL < 500K, HBV negative, sensitive on GART)

# What Drugs should you start?

## IAS guidance

Tenofovir/Emtricitabine/Bictegravir 1 po daily

Or

Tenofovir (TAF or TDF) **plus** [Emtricitabine (FTC) or  
Lamivudine (3TC)] **plus** Dolutegravir daily

Or

Dolutegravir/Lamivudine 1 po daily

(if HIV VL < 500K, HBV negative, sensitive on GART)

# Pregnancy

- Pregnancy during first trimester and non-pregnant women considering becoming pregnant
  - Dolutegravir or Darunavir/ritonavir now preferred
  - Abacavir/Lamivudine or Tenofovir (TAF or TDF) plus FTC or 3TC
  - Bictegravir safety is unknown
  - Don't use cobicistat or injectable ART



# How soon should you treat?

(IAS 12/1/2022)

- Treat **within 7 days** of diagnosis ideally
- Treat the **same day** as rapid test diagnosis if possible
- **Treat at the first clinic visit** when establishing care

# What if there is an opportunistic infection?

(IAS 12/1/2022)

- Start ART within 2 weeks for most opportunistic infections
- Tuberculosis
  - Start within 2 weeks for active TB without meningitis especially if CD4 count is  $< 50/\mu\text{l}$
  - Start steroids with TB Rx for TB meningitis then start ART within two weeks
- Cryptococcal meningitis
  - Start ART within 2-4 weeks of diagnosis
  - If antigenemic with negative LP, Start ART immediately
- Cancer
  - Start ART immediately

# Antiretroviral Therapy Basics

- The goal: Undetectable viral load at 4-6 months
- Consult an HIV Specialist if
  - Viral load fails to drop to undetectable at 4-6 month
  - Viral load rebounds to detectable level after previously undetectable
  - Pregnancy
  - Hepatitis B or C co-infection present

## Virologic failure

- Three active drugs are no longer required for addressing virologic failure
- “A new regimen can include two fully active drugs if at least one with a high resistance barrier is included (Dolutegravir or boosted Darunavir)

# Injectable Antiretroviral Therapy

- **Injectable cabotegravir and rilpivirine IM injection can replace Rx for people on oral ART with suppression for 3-6 months who:**
  - have no baseline resistance to either medication,
  - have no prior virologic treatment failures,
  - do not have active hepatitis B virus (HBV) infection (unless also receiving an oral HBV active regimen),
  - are not pregnant and are not planning on becoming pregnant, and
  - are not receiving medications with significant drug interactions with cabotegravir and rilpivirine.
- **The IM regimen can be started immediately without oral lead in**
- **Monthly or every two month regimens acceptable (7 day window)**

# What's Next?

- Prevent co-infections
- Prevent cancer
- Prevent complications of HIV and its therapy
- Preventing transmission to others
- Maintaining primary care
- **Caring for the whole person**

# Preventing Opportunistic Infections

Organism	CD4 Count Cutoff	Drug Regimens
Pneumocystis	$\leq 200$	TMP/SMZ DS 1 po qd Dapsone 100 mg po qd Atovaquone 1500 mg po qd
Toxoplasmosis	$\leq 100$ & (+) serology	TMP /SMZ DS 1 po qd Pyrimethamine, Leukovorin Dapsone
Mycobacterium Avium complex	$\leq 50$ and not starting ART	Azithromycin 1200 mg po weekly Clarithromycin 500mg po BID

# *Pneumocystis jiroveci* pneumonia



<https://radiopaedia.org/articles/1901>



# Routine General Health Maintenance

- Eye Care:
  - Annual eye clinic check-up to rule out HIV related eye disease.
- Dental Care:
  - Annual dental clinic check-up to rule out HIV related oral disease.
- GYN Care:
  - Pap smear preferred for women < 30 years of age.
    - If negative, repeat in 1 year
    - If 3 consecutive annual Paps are negative, test every 3 years
  - Pap plus HPV co-testing can be done every 3 years for women  $\geq 30$
  - Biennial Mammography age 50-74

# Health Maintenance

- **Bone Health**

- DEXA scans are indicated for **post-menopausal women** and for **men aged 50 or greater** with HIV, especially those on Tenofovir.
- Vitamin D level testing is recommended once and periodically as indicated.

- **TB screening:**

- An IGRA test (or PPD) should be done at diagnosis and annually.
- **Twelve weeks INH-Rifapentine** or 9 months of INH are indicated for PPD tests greater than 5 mm induration (not 10 mm) or positive Quantiferon tests.
- INH-Rifapentine can also be used with dolutegravir
- A symptom review and CXR are mandatory to **rule out TB disease first.**

# Health Maintenance

- **Vaccines:**

- Hepatitis B, influenza, TdAP and pneumococcus vaccines.
  - Consider Heplisav for failure to convert to HBsAb +
- **PCV-20 alone or PCV-15 followed by PPSV-23**
- HPV vaccine for females and males aged 9-26 per ACIP (up through age 45 permitted by FDA and recommended by IHS)
- Meningococcal vaccine (Menactra® or Menveo®)
- Offer Varicella vaccine if CD4 > 200 and nonimmune
- **Shingrix recommended for HIV positive people (aged 19 and up) regardless of CD4 count**
- **COVID series: 2-3 doses initial series then bivalent vaccine**
- **Mpox vaccine: two doses intradermal or subcutaneous**

# Health Maintenance

## • Mental Health:

- All patients should be screened for **depression, anxiety, suicidal ideation and substance use** at every visit.
- Refer to a **mental health or substance use disorder counselor** with MAT services as appropriate and offer.
  - Naltrexone IM and PO or Acamprosate for alcohol UD
  - Suboxone for opiate UD
  - Mirtazapine or Bupropion/Naltrexone for methamphetamine UD
- **Domestic violence screening** is indicated at every visit with social work referral as appropriate

# Health Maintenance

- **Spiritual Health:**
  - All patients should be screened for spiritual health concerns and referred to a **traditional healer** or other **pastoral care provider** if desired.
- **Gender Affirming Care:**
  - All IHS patients deserve gender-affirming primary and referral care.

# HIV Prevention in Primary Care

## U = U: Undetectable equals un-transmittable

- If HIV viral load is  $< 200$  copies/ml, there is “essentially no risk of transmission” to the HIV uninfected partner
- Condom usage should be promoted to decrease STI risk
- PrEP is recommended for any person with an HIV positive partner where the partner is not on ART or not with consistently suppressed viral load
- PrEP is also indicated when the HIV negative partner has additional partners or shares injection equipment

# References

- Primary Care Guidance for Persons With Human Immunodeficiency Virus: 2020 Update by the HIV Medicine Association of the Infectious Diseases Society of America, Thompson et al., <https://www.idsociety.org/practice-guideline/primary-care-management-of-people-with-hiv/>
- DHHS Adult and Adolescent Antiretroviral HIV Guidelines: <https://clinicalinfo.hiv.gov/en/guidelines/adult-and-adolescent-arv/hhs-adults-and-adolescents-antiretroviral-guidelines-panel>
- IAS Antiretroviral Drugs guidelines: <https://doi.org/10.1001/jama.2022.22246>
- ACIP Recombinant Shingles Vaccine for immunocompromised patients: <https://www.cdc.gov/mmwr/volumes/71/wr/mm7103a2.htm>
- ACIP Pneumococcal vaccine recommendations: [https://www.cdc.gov/mmwr/volumes/71/wr/mm7104a1.htm?s\\_cid=mm7104a1\\_w](https://www.cdc.gov/mmwr/volumes/71/wr/mm7104a1.htm?s_cid=mm7104a1_w)



