

The Intersections of Oral Health and Primary Care

Part I

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Disclosures

- No financial relationships with commercial entities to disclose
- This slide set has been peer-reviewed to ensure that there are no conflicts of interest represented in the presentation

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Learning Objectives

By the end of this module, the learner will be able to:

- Define what a comorbidity is
- Describe the most common comorbidities in PWH
- Identify the relationships between oral disease and comorbidities cardiovascular disease, kidney disease, and neurocognitive disorders.
- Apply dental recommendations for PWH



HIV Continuum of Care



Source: https://www.hiv.gov/federal-response/policies-issues/hiv-aids-care-continuum



Ending the HIV Epidemic: A Plan for America

HHS is proposing a once-in-a-generation opportunity to eliminate new HIV infections in our nation. The multi-year program will infuse 48 counties, Washington, D.C., San Juan, Puerto Rico, as well as 7 states that have a substantial rural HIV burden with the additional expertise, technology, and resources needed to end the HIV epidemic in the United States. Our four strategies – diagnose, treat, protect, and respond – will be implemented across the entire U.S. within 10 years.



The Initiative will target our resources to the 48 highest burden counties, Washington, D.C., San Juan, Puerto Rico, and 7 states with a substantial rural HIV burden.



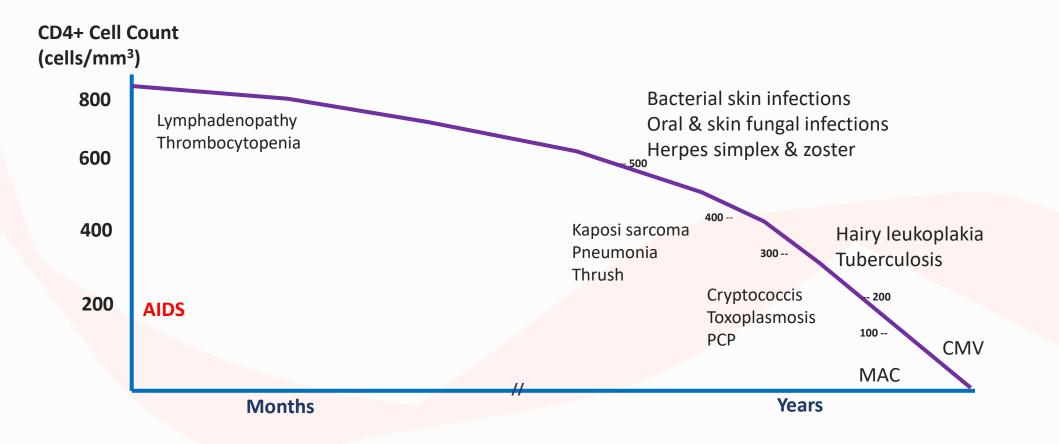
Geographical Selection:

Data on burden of HIV in the US shows areas where HIV transmission occurs more frequently. More than 50% of new HIV diagnoses" occurred in only 48 counties, Washington, D.C., and San Juan, Puerto Rico. In addition, 7 states have a substantial rural burden – with over 75 cases and 10% or more of their diagnoses in rural areas.





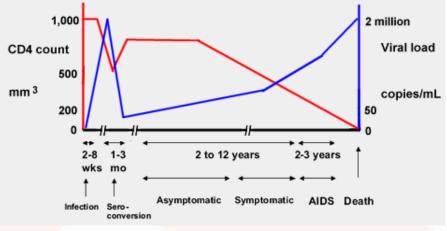
Correlation of Opportunistic Infections with CD4 Count





Dental Recommendations for Treating PWH

- The magnitude of the viral load is not an indicator to withhold dental treatment for the patient
- All health professionals can play an important part in reminding patients of the need for regular follow up and monitoring of these markers



Source: https://i-base.info/ttfa/section-2/14-how-cd4-and-viral-load-are-related/

It is recommended that CD4 and Viral Load Determinants are completed every six months to one year.



What is a Comorbidity?

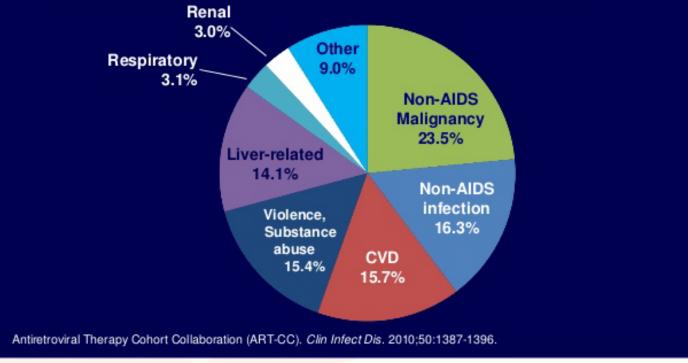
The simultaneous presence of two chronic diseases or conditions in a patient.

 Comorbidity is associated with worse health outcomes, more complex clinical management, increased health care costs.



Non-AIDS Diseases Now Account for Majority of Deaths in HIV (1996-2006)

- 1,876 deaths among 39,727 patients
- Non-AIDS related deaths accounted for 50.5%

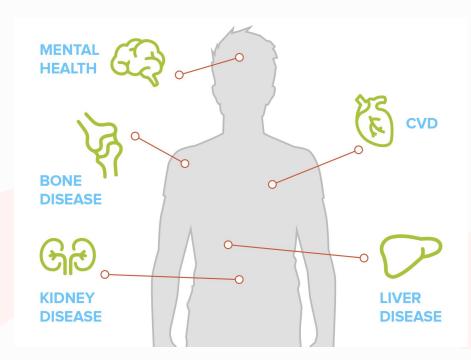


https://www.slideshare.net/ucsdavrc/immune-activation-in-treated-hiv-infection

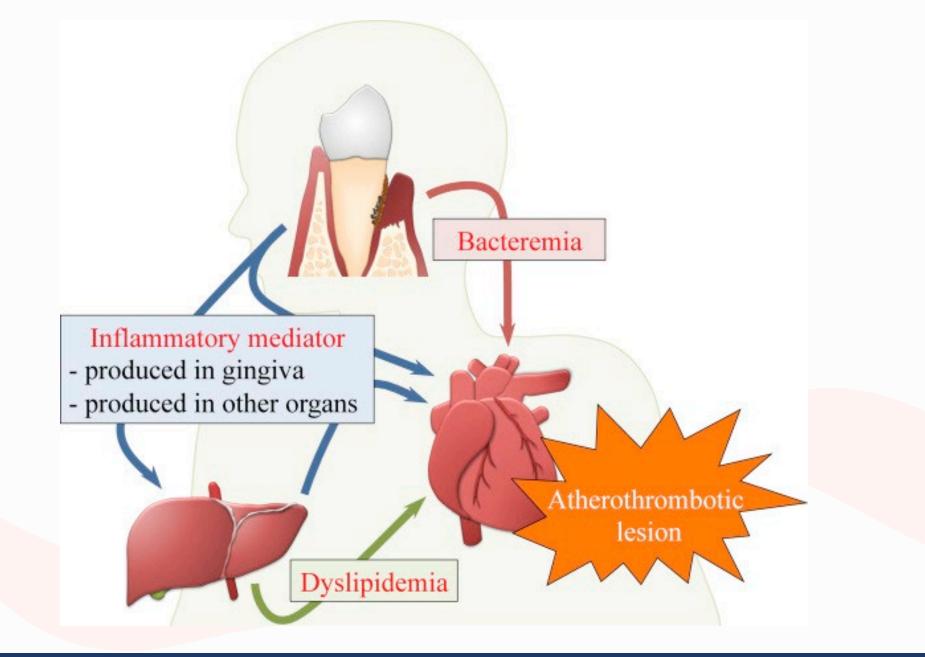


Common Comorbidities in Patients with HIV

- Cardiovascular Disease
- Kidney Disease
- Neurocognitive
- Hepatic Function
- Bone Disorders
- Diabetes

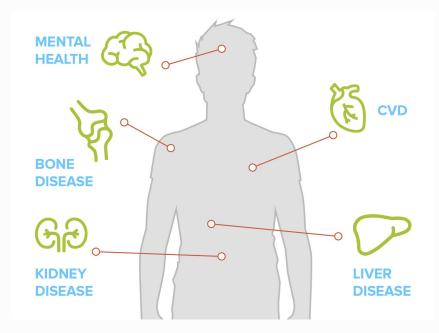








Polson AM, Kang T. Associations between periodontal diseases and systemic diseases: a review of the inter-relationships and interactions with diabetes, respiratory diseases, cardiovascular diseases and osteoporosis. Public Health. 2008;122(4):417-433



Cardiovascular Disease

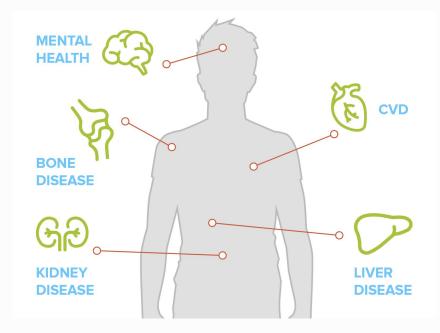
COMMON COMORBIDITIES IN PATIENTS WITH HIV



Cardiovascular Disease

- Studies done many years ago have shown that patients with a history of myocardial infarction or cerebrovascular attacks have worse oral health than control individuals
- Annually, cardiovascular disease accounts for approximately 32-50% of deaths in the United States and 29-31% worldwide and may be one of the best-studied relationships between oral health and systemic health response
- Elevated blood cholesterol, hypertension, diabetes, and smoking are the traditionally discussed risk factors for cardiovascular disease.





Kidney Disease

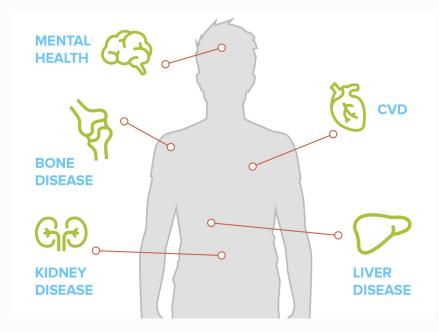
COMMON COMORBIDITIES IN PATIENTS WITH HIV



Kidney Disease

 Periodontal disease and other conditions that result in poor oral health are common in patients with chronic kidney disease. These oral conditions can lead to systemic inflammation, infection, protein wasting, and the development of atherosclerotic lesions, all of which worsen morbidity and mortality in chronic kidney disease patients.





Neurocognitive

COMMON COMORBIDITIES IN PATIENTS WITH HIV



Neurocognitive

 Periodontitis is an oral inflammatory disease and may contribute to low-grade systemic inflammation. Based on the contribution of periodontitis to systemic inflammation and the potential role of systemic inflammation in neuroinflammation, many epidemiological studies have investigated a possible association between periodontitis and mild cognitive impairment or dementia.



To help avoid any serious dental issues, **preventing** and quickly treating infections is essential!

GENERAL DENTAL RECOMMENDATIONS





General Dental Recommendations

Excellent oral hygiene will remove bacteria that cause decay and gum disease. Some helpful and easy suggestions:

- Brush twice daily with a soft bristle brush and, ideally, floss once a day (or use a floss substitute. "Thorough" is key. Take your time. Three surfaces on each tooth need to be brushed, and the two side surfaces flossed.
- Use a fluoridated toothpaste to help strengthen teeth against development of cavities. Your dentist may also suggest using fluoride or antimicrobial rinses.
- You may have a "dry mouth" as a side effect of some drugs used to HIV and other comorbidities. That makes it easier for cavities and gum diseases to develop. To increase saliva, try chewing sugarless gum or sucking on sugarless candy. You can also try a saliva substitute.



General Dental Recommendations (cont.)

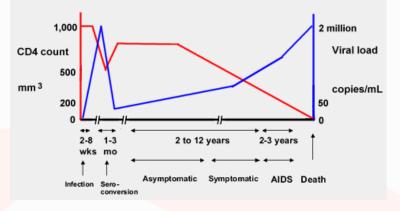
Excellent oral hygiene will remove bacteria that cause decay and gum disease. Some helpful and easy suggestions:

- Regular dental exams, at least twice a year, can detect and treat cavities and gum disease before they become serious. A cleaning is helpful, too, by scraping away tartar that irritates the gums.
- Full or partial dentures should be carefully cleaned daily and removed at night to prevent development of sore spots or ulcers.
- Refer all patients for comprehensive dental care



Dental Recommendations for Treating PWH

- The magnitude of the viral load is not an indicator to withhold dental treatment for the patient.
- All health professionals can play an important part in reminding patients of the need for regular follow up and monitoring of these markers. It is recommended that the CD4 and viral load determinants be done every six months to one year.



Source: https://i-base.info/ttfa/section-2/14-how-cd4-and-viral-load-are-related/



Antibiotic Prophylaxis

- There are no data supporting the need for routine antibiotic coverage to prevent bacteremia or septicemia arising from dental procedures
- Prophylactic antibiotics should not be prescribed routinely for the dental visit when the HIV infection is well controlled





Key Takeaways

- Patients living with HIV have a higher prevalence of comorbidities that those that are HIV negative.
- The link between Oral Health and overall health is well established in the literature.
- Understanding the link between Oral Health and comorbidities is important for Primary Care Providers
- Referring all patients for comprehensive regular dental care is of utmost importance.



https://www.seaetc.com/oral-health-and-resourcestraining-center/

PLEASE VISIT OUR SOUTHEAST AIDS EDUCATION & TRAINING CENTER – ORAL HEALTH AND RESOURCES SITE



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AETC Program National Centers and HIV Curriculum

- National Coordinating Resource Center serves as the central web –based repository for AETC Program training and capacity building resources; its website includes a free virtual library with training and technical assistance materials, a program directory, and a calendar of trainings and other events. Learn more: https://aidsetc.org/
- National Clinical Consultation Center provides free, peer-to-peer, expert advice for health professionals on HIV prevention, care, and treatment and related topics. Learn more: <u>https://nccc/ucsf.edu</u>
- National HIV Curriculum provides ongoing, up –to-date HIV training and information for health professionals through a free, web –based curriculum; also provides free CME credits, CNE contact hours, CE contact hours, and maintenance of certification credits. Learn more: <u>www.hiv.uw.edu</u>







Thank You!

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