HIV & Aging:
It’s not just about HIV

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Overview

1. Review the epidemiology of HIV in older adults.
2. Describe common complications of aging.
3. Discuss the clinical considerations and best practices for managing patients with HIV and those at-risk for HIV as they age.
Stage 3 (AIDS) Classifications and Deaths of Persons with HIV Infection Ever Classified as Stage 3 (AIDS), among Adults and Adolescents, 1985–2012—United States and 6 Dependent Areas

Note. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting. Deaths of persons with HIV infection, stage 3 (AIDS) may be due to any cause.
What are some of the challenges?

“There are some things they don’t teach you in medical school. I think you’ve got one of those things.”
“The most common chronic condition experienced by adults is multimorbidity, the coexistence of multiple chronic diseases or conditions.”
Multimorbidity

• More than 50% of older adults will have 3 or more chronic conditions

• Higher Rates of Death & Disability

• Institutionalization

• Poorer quality of life

• Adverse effects of treatment or interventions

American Geriatrics Society, 2012
DOI: 10.1111/j.1532-5415.2012.04188.x
Medicare data
Comorbidity Prevalence among HIV infected Persons Is Increasing

Trends in Comorbid Conditions: Medicare HIV Patients

*Significant at p<.05 for 2003 vs. 2013

- CV Event: 9.6% vs. 16.0%
- Renal impairment: 9.2% vs. 20.1%
- Fracture/osteoporosis: 6.7% vs. 11.2%
- Hypertension: 34.2% vs. 65.1%
- Diabetes: 20.4% vs. 31.1%
- Obesity: 0.0% vs. 6.3%
- Hyperlipidemia: 12.1% vs. 47.5%

Meyer, ICAAC, 2015
Comorbidities Increase With Age and With HIV Infection

“Just one pill a day....”
ATHENA and Swiss HIV Cohort Studies: Polypharmacy Among HIV+ Pts on ART

- Predicts that 20% of pts will be taking ≥ 3 meds other than ART in 2030
- 115 (5.2%) of 2233 participants 50-64 yrs of age and 64 (14.2%) of 450 participants ≥ 65 yrs of age received ≥ 4 meds other than ART

Swiss HIV Cohort Study (N = 8444)

Prospective Observational study

Frailty and HIV

• Incidence of frailty higher in HIV-infected persons compared to uninfected persons and at an earlier age.
  • Unintentional weight loss
  • Exhaustion
  • Weakness
  • Slowness
  • Low levels of activity

• Role of ART, Insulin resistance
**D:A:D: Renal Disease and CVD**

Kaplan-Meier Progression to CVD by Confirmed Baseline eGFR

- Baseline (confirmed) eGFR
  - ≤ 30
  - > 30 to ≤ 60
  - > 60 -to≤ 90
  - > 90

Percentage With CVD vs. Months After Baseline

CVD Outcomes Underestimated in HIV-Positive Pts by Risk Calculators

- CVD risk scores calculated with data from 2006-2009 for pts in Partners HealthCare System Cohort\(^1\)

MACS: Rates of DM Increased in HIV-Positive Pts on ART

- Rate of incident DM was 4.7 cases/100 PYs in HIV-positive men vs 1.4 cases/100 PYs in seronegative men

Fracture Prevalence Is Increased in Older HIV-Positive Pts

- 8525 HIV-infected pts compared with 2,208,792 uninfected pts in Partners HealthCare System

Aging, Antiviral treatment, HIV infection, and Interplay of Age, ART, & Morbidity.
Traditional Factors Are the Biggest Contributor to CVD in HIV Population

- Traditional Factors
- Cardiovascular Disease
  - HIV Infection
  - ART
  - Family HX
  - Gender
  - Age
  - Diet
  - Tobacco Use
  - Diabetes
  - Hypertension
  - Lipids
  - Obesity
The HIV and Aging Consensus Project

Recommended Treatment Strategies for Clinicians Managing Older Patients with HIV

Sponsored by
American Academy of HIV Medicine
AIDS Community Research Initiative of America
Supporting Partner:
American Geriatrics Society

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10-13 November 2010 - Barcelona, Spain
Doing double duty....

- Focus on strategies or interventions that may impact more than one condition and affect quality of life
  - Nutrition
  - Exercise
  - Function/independence
  - Sleep
  - Mental Health
  - Social support
  - Caregiver stress
Things to do....

• Elicit and incorporate patient preferences

• Recognize limitations

• Frame decisions within the context of risk and benefits

• Consider treatment complexity and feasibility

• Choose therapies that optimize benefit, minimize harm, and enhance quality of life.

American Geriatrics Society, 2012. Guiding Principles for the Care of Older Adults with multimorbidity.
Team-based Care Opportunities

- Engagement in Care
- Reducing high-risk events
- Coordination of care
- Early identification of Co-Morbidities
- Reducing Stigma
What does this mean for Nurses?

• Need to be familiar with geriatric care.
• HIV clinicians have had to become “geriatricians” out of default.
• Continue to advocate and educate patients and other providers about aging.
• Prepare our future workforce to care for the full spectrum of disease, wellness, and end of life care.
Take Home Points

• **Co-morbid chronic disease** plays a role in patients with long-standing disease and those who are aging.

• **Modification of risk factors** (smoking cessation, exercise, lipid management) may improve or reduce risk of CVD, CKD, osteopenia.
• Early diagnosis and treatment can improve outcomes in this population.

• Newer agents may reduce risk for certain co-morbidities.

• Clinicians should work together to help persons living with HIV achieve optimal health.
References & Resources

• HIV-Age.org
  www.hiv-age.org

• Adults 50 and Over
  http://www.cdc.gov/hiv/group/age/olderamericans/index.html
Thank You

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