

Frailty in HIV and Aging

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Educational Objectives

By the end of the session, learners will be able to:

1. Choose two instruments used to evaluate frailty in HIV-infected patients.
2. Describe two health outcomes that are adversely affected by frailty.
3. Demonstrate how to counsel frail HIV-infected patients regarding prognosis and goals of care.

Suggested reading:

1. American Academy of HIV Medicine (online). Assessing frailty and functional capacity. Available at: <http://hiv-age.org/wp-content/uploads/2014/02/3.-Assessing-Frailty-and-Functional-Capacity.pdf>. Accessed August 13, 2014.

CASE ONE:

Mrs. Feeble is a 70-year-old woman with end-stage-renal disease (ESRD) from hypertension on dialysis, chronic obstructive pulmonary disease (COPD) on 2L oxygen with recurrent pulmonary Mycobacterium Avium Intracellulare (MAI) infection failing past therapies, coronary artery disease s/p stent placement 1 year prior with congestive heart failure (ejection fraction of 40%), right hip osteoarthritis and HIV well-controlled on ART. Patient is in your clinic with her daughter who is her health care proxy for a pre-operative assessment of an elective ventral hernia repair. The daughter tells you the surgeon mentioned that Mrs. Feeble looks frail and wants her optimized before the surgery.

Questions:

1. What is frailty? How do you determine if someone is frail?
2. How is frailty different in HIV-infected patients compared to the general population?
3. What is the effect of frailty on health outcomes?

CASE ONE CONTINUED:

Mrs. Feeble lost 20 lbs in the past 3 months due to recurrent MAI infections in her lungs. She spends most of her time at home due to weakness and fatigue, except on dialysis days when she gets transported to the dialysis center. She is unstable on her feet and usually holds on to other people when she walks outside her apartment. She feels depressed due to her decline in health and her dependence on dialysis, although she denies suicidal or homicidal ideation. She does not have pain related to the hernia or her other medical conditions.

On exam, her pulse was 78, BP 120/65, oxygen saturation 90% on 2L. Her six-minute walk distance was 300m. Her albumin was 3.0 g/dL.

- 4. Is Mrs. Feeble frail? What frailty measure would you use to answer this question.**
- 5. What would you do to optimize Mrs. Feeble for the upcoming elective surgery? How would you address her mood, nutrition, and physical function?**
- 6. How would you counsel Mrs. Feeble's daughter regarding the prognosis?**

Additional reference:

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4. Desquilbet L, Jacobson L, Fried LP, et al. Multicenter AIDS Cohort Study. HIV-1 infection is associated with an earlier occurrence of a phenotype related to frailty. *J Gerontol A Biol Sci Med Sci* 62 (2007):1279-86.
5. Althoff KN, Jacobson LP, Cranston RD, et al. Age, comorbidities, and AIDS predict a frailty phenotype in men who have sex with men. *J Gerontolo A Biol Sci Med Sci* 69.2 (2014):189-198.
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7. Milne AC, Potter J, Vivanti A, et al. Protein and energy supplementation in elderly people at risk from malnutrition. *Cochrane Database Syst Rev* 2009.
8. Souza PM., et al. Effect of progressive resistance exercise on strength evolution of elderly patients living with HIV compared to healthy controls. *Clinics (Sao Paulo)* 66.2 (2011): 261-266.
9. Beddhu S, Bruns FJ, Saul M, et al. A Simple Comorbidity Scale Predicts Clinical Outcomes and Costs in Dialysis Patients. *The American Journal of Medicine* 108 (2000):609-613.
10. Goldwasser P, Mittman N, Antignani A, et al. Predictors of mortality in hemodialysis patients. *Journal of the American Society of Nephrology* 3 (1993):1613-22.
11. Baile WF, Buckman R, Lenzi R, et al. SPIKES – a six-step protocol for delivering bad news: application to the patient with cancer. *The Oncologist* 5 (2000):302-311.