Rapid Initiation of Antiretroviral Therapy for People with HIV

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BACKGROUND

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Antiretroviral therapy (ART) is recommended for all people with HIV to improve and preserve their health and to reduce transmission of HIV to others.¹ Increasingly, rapid ART starts have become a clinical and public health priority, with the Department of Health and Human Services Panel on Antiretroviral Guidelines for Adults and Adolescents recommending that ART be started as soon as possible after HIV diagnosis.¹ Definitions of what constitutes a rapid start of ART vary; the most stringent is also termed immediate ART and occurs when ART is prescribed on the same day an HIV diagnosis is delivered. This fact sheet reviews the potential benefits and rationale for rapid ART starts, outlines potential pitfalls, and offers practical, evidence-based tips on ART selection for rapid starts.

EVIDENCE FOR RAPID ART INITIATION

Randomized controlled trials conducted in resource-limited settings and observational studies in the United States and elsewhere have provided evidence for rapid ART initiation. Studies in South Africa, Lesotho, and Haiti showed improved linkage to care and viral suppression among people assigned to rapid ART initiation compared to standard of care, in which ART was prescribed after several weeks and often multiple counseling sessions.²⁻⁴ In addition, in the study conducted in Haiti, mortality was lower among those who received rapid ART initiation;³ whether rapid ART initiation would lower mortality in the United States is uncertain. An observational study of rapid ART initiation in San Francisco found a high rate of viral suppression at one year (92%) in a study population in which substance use disorders, mental health conditions, and homelessness were common, suggesting that these factors did not preclude the success of rapid treatment models.⁵

IMPLEMENTING RAPID ART INITIATION

Successfully implementing rapid ART starts requires planning and, often, lengthy initial clinic visits. Key components of a rapid start program include:

Counseling

Extensive or numerous counseling sessions prior to ART initiation, as occurred in the past, are not required. However, patients should still be counseled about the rationale for ART and its expected benefits, the administration and potential side effects of ART, and the importance of taking medication as prescribed to achieve viral suppression and prevent the development of antiretroviral drug resistance. Clinicians should also explore potential barriers to ART adherence and help overcome those barriers.

Baseline laboratory evaluation

Rapid initiation of ART does not obviate the need for a baseline laboratory evaluation. Clinicians should still obtain all the baseline testing recommended for people with HIV, including a viral load, CD4 count, drug resistance genotype, hepatitis B and C serologies, and assessment of liver enzymes and renal function.¹ However, rapid ART initiation means that ART may be prescribed before some of these test results are available; see below for a discussion of how this impacts medication selection.

Considering contraindications to rapid ART initiation

Although rapid initiation of ART is appropriate for many people newly diagnosed with HIV, very early initiation of ART may be harmful in the setting of certain opportunistic infections, namely cryptococcal and tuberculous meningitis. If signs or symptoms of these conditions are present, clinicians should not proceed with rapid ART initiation until these conditions can be ruled out or managed, in accordance with guidelines on treatment of opportunistic infections.⁶

Selecting an ART regimen

Because ART may be started before the results of the viral load, CD4 count, drug resistance genotype, and hepatitis B serologies are known, clinicians should avoid prescribing regimens for which there are viral load or CD4 count cutoffs for initial therapy (e.g., rilpivirine-based treatments and two-drug regimens), regimens more likely to be affected by transmitted drug resistance (e.g., non-nucleoside reverse transcriptase inhibitor-based regimens), and those which do not concurrently address hepatitis B. Because the results of HLA-B*5701 testing are also not likely to be available quickly, clinicians should also avoid using abacavir-containing regimens for rapid ART initiation. Common regimens prescribed for rapid ART initiation include the single table regimen tenofovir alafenamide/emtricitabine/bictegravir and the dual-tablet regimens tenofovir alafenamide/emtricitabine with dolutegravir or tenofovir disoproxil fumarate/ emtricitabine and dolutegravir.

Ensuring access to medication

Beyond regimen selection, rapid ART start programs must ensure timely access to medications. This may necessitate the availability of on-demand access to benefits navigation and/or ART starter packs.

CONCLUSION

ART is recommended for all people with HIV, and randomized trials and observational studies suggest that rapid initiation of ART after HIV diagnosis improves linkage to care and viral suppression. Providing rapid ART initiation requires selection of a compatible regimen and, often, on-demand benefits navigation to ensure ongoing access to care and medications.

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ACKNOWLEDGMENTS

This publication was developed by Fenway Health Division of Education and Training team member: Kevin Ard, MD, MPH.

This project was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under cooperative agreement number U30CS22742, Training and Technical Assistance National Cooperative Agreements (NCAs) for \$625,000.00 with 0% of the total NCA project financed with non-federal sources. PACA was developed with support from the National Institutes of Minority Health and Health Disparities (U01MD011281; PI: B. Mustanski). This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS, or the U.S. Government.