

appointment times to allow both patients and providers to establish and clarify the goals of care.

8. Consultation with a palliative care specialist to assist with pain management and nonpain symptoms and to address goals of care is recommended (strong, low).
9. Patients with advanced illness require a support system beyond the clinic, and timely referrals for palliative or hospice care are recommended. The primary care provider must remain in communication with the patient and family through the end of life to ensure accurate continuity and to preclude a sense of abandonment (strong, low).

IV. What are the recommended nonpharmacological treatments for chronic pain in persons living with human immunodeficiency virus?

Recommendations

10. Cognitive behavioral therapy (CBT) is recommended for chronic pain management (strong, moderate). *Remark: CBT promotes patient acceptance of responsibility for change and the development of adaptive behaviors (eg, exercise) while addressing maladaptive behaviors (eg, avoiding exercise due to fears of pain).*
11. Yoga is recommended for the treatment of chronic neck/back pain, headache, rheumatoid arthritis, and general musculoskeletal pain (strong, moderate).
12. Physical and occupational therapy are recommended for chronic pain (strong, low).
13. Hypnosis is recommended for neuropathic pain (strong, low).
14. Clinicians might consider a trial of acupuncture for chronic pain (weak, moderate). *Values and preferences: This recommendation places a relatively high value on the reduction of symptoms and few undesirable effects. Remark: Evidence to date is available only for acupuncture in the absence of amitriptyline and among PLWH with poorer health in the era before highly active antiretroviral therapy.*

V. What are the recommended pharmacological treatments for chronic neuropathic pain in persons living with human immunodeficiency virus?

Nonopioid Recommendations

15. Early initiation of antiretroviral therapy is recommended for the prevention and treatment of HIV-associated distal symmetric polyneuropathy (strong, low).
16. Gabapentin is recommended as a first-line oral pharmacological treatment of chronic HIV-associated neuropathic pain (strong, moderate). *Remark: A typical adult regimen will titrate to 2400 mg per day in divided doses. Evidence also supports that gabapentin improves sleep scores; somnolence was reported by 80% of patients who received gabapentin (strong, low).*
 - a. If patients have an inadequate response to gabapentin,

clinicians might consider a trial of serotonin-norepinephrine reuptake inhibitors based on their effectiveness in the general population (weak, moderate).

- b. If patients have an inadequate response to gabapentin, clinicians might consider a trial of tricyclic antidepressants (weak, moderate).
 - c. If patients have an inadequate response to gabapentin, clinicians might consider a trial of pregabalin for patients with post-herpetic neuralgia (weak, moderate).
17. Capsaicin is recommended as a topical treatment for the management of chronic HIV-associated peripheral neuropathic pain (strong, high). *Remark: A single 30-minute application of an 8% dermal patch or cream administered at the site of pain can provide pain relief for at least 12 weeks. Erythema and pain are common side effects for which a 60-minute application of 4% lidocaine can be applied and wiped off before applying capsaicin (strong, high).*
 18. Medical cannabis may be an effective treatment in appropriate patients (weak, moderate). *Values and preferences: This recommendation places a relatively high value on the reduction of symptoms and a relatively low value on the legal implication of medical cannabis possession. Remark: Current evidence suggests medical cannabis may be more effective for patients with a history of prior cannabis use; the potential benefits of a trial of cannabis need to be balanced with the potential risks of neuropsychiatric adverse effects at higher doses, the harmful effects of smoked forms of cannabis in patients with preexisting severe lung disease, and addiction risk to patients with cannabis use disorder.*
 19. We recommend alpha lipoic acid (ALA) for the management of chronic HIV-associated peripheral neuropathic pain (strong, low). *Values and preferences: This recommendation places a high value on providing tolerable medications that may be of some benefit in patients with difficult-to-treat neuropathic pain. Remark: Studies in patients with HIV are lacking; however, there is a growing body of literature of the benefits of ALA in patients with diabetic neuropathy.*
 20. We recommend against using lamotrigine to relieve HIV-associated neuropathic pain (strong, moderate). *Values and preferences: This recommendation places a relatively high value on the discontinuation of neurotoxic agents and on minimizing the incidence of lamotrigine-associated rash and places a relatively low value on the reduction in pain symptoms found in an earlier randomized controlled trial by the same authors. Remark: A benefit was only seen in patients currently receiving neurotoxic antiretroviral therapy (ART), and we recommend discontinuing all neurotoxic ART.*

Use of Opioids

21. For PLWH, opioid analgesics should not be prescribed as a first-line agent for the long-term management of chronic