



Guidelines for the Use of Antiretroviral Agents in Pediatric HIV Infection

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Table 13k. Antiretroviral Therapy-Associated Adverse Effects and Management Recommendations—Peripheral Nervous System Toxicity (Last updated April 27, 2017; last reviewed April 27, 2017)

Adverse Effects	Associated ARVs	Onset/Clinical Manifestations	Estimated Frequency ^a	Risk Factors	Prevention/Monitoring	Management
ARV Toxic Neuropathy^b	d4T, ddl PIs	<p>Onset: Weeks to months</p> <p>Presentation:</p> <ul style="list-style-type: none"> Decreased sensation Aching, burning, painful numbness Hyperalgesia Allodynia Decreased or absent ankle reflexes <p>Distribution:</p> <ul style="list-style-type: none"> Bilateral soles of feet, ascending to legs and fingertips 	<p><u>Children:</u></p> <ul style="list-style-type: none"> Around 1% overall d4T—10% to 25% <p><u>Adults:</u></p> <ul style="list-style-type: none"> d4T—up to 50% 	<ul style="list-style-type: none"> Pre-existing neuropathy Elevated triglyceride levels Poor nutrition More advanced HIV disease Concomitant use of other neurotoxic agents (e.g., INH) Some mitochondrial DNA haplogroups may have increased risk. 	<p>Avoid use of d4T and ddl.</p> <p>Monitor for symptoms and signs of peripheral neuropathy.</p>	<p>Discontinue offending agent.</p> <p>Topical capsaicin 8% may be helpful.</p> <p>Consider referral to a neurologist.</p> <p>Data are insufficient to allow the Panel to recommend use of any of the following modalities: tricyclic antidepressants, gabapentin, pregabalin, mexiletine, Lamotrigine, and acupuncture or other complementary approaches</p>

^a Peripheral neuropathy may be underreported in children because symptoms are difficult to evaluate in young children.

^b HIV infection itself may cause a distal sensory neuropathy that is phenotypically identical to ARV toxic neuropathy.

Key to Acronyms: ARV = antiretroviral; d4T = stavudine; ddl = didanosine; INH = isoniazid; NRTI = nucleoside reverse transcriptase inhibitor; PI = protease inhibitor

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