

## Letters to the Editor

well-tolerated drug as regards myopathy in our study on Indian patients.”<sup>[1]</sup> I have some comments on this work. First, the number of subjects in this study is very small and might have a limitation in further interpretation. Second, the actual mechanism of zidovudine myopathy is believed to be due to a zidovudine-induced mitochondrial DNA depletion.<sup>[2]</sup> The corresponding mechanisms include azidothymidine (AZT) -induced oxidative stress, direct inhibition of mitochondrial bioenergetic machinery, and mitochondrial depletion of L-carnitine.<sup>[3]</sup> Based on these mechanisms, there should be no race difference of this zidovudine adverse effect. The higher prevalence in the Western population might be due to the reason that is given by Authier *et al.*, that “lengthening of the survival of HIV-infected individuals has been associated with an increasing prevalence of iatrogenic conditions”.<sup>[4]</sup>

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## References

1. Sagar A, Mohanty AP, Bahal A. Zidovudine-induced myopathy: A study in Indian patients. *J Neurosci Rural Pract* 2010;1:63-6.
2. Kuncel RW. Agents and mechanisms of toxic myopathy. *Curr Opin Neurol* 2009;22:506-15.
3. Scruggs ER, Dirks Naylor AJ. Mechanisms of zidovudine-induced mitochondrial toxicity and myopathy. *Pharmacology* 2008;82:83-8.
4. Authier FJ, Chariot P, Gherardi RK. Skeletal muscle involvement in human immunodeficiency virus (HIV)-infected patients in the era of highly active antiretroviral therapy (HAART). *Muscle Nerve* 2005;32:247-60.

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# Zidovudine-induced myopathy

Sir,

I read the recent publication on zidovudine-induced myopathy with a great interest.<sup>[1]</sup> Sagar *et al.*, concluded that "Zidovudine myopathy may be a constraint for use of the drug in the Western population; however, it is a