Is it safe to switch between efavirenz and nevirapine in the event of toxicity?

Substituting efavirenz for nevirapine following hepatotoxicity or cutaneous hypersensitivity appears to be reasonable safe, providing that the adverse reaction to nevirapine is not life-threatening, a review of studies on cross-reactivity between nevirapine and efavirenz in *Lancet Infectious Diseases* on November '07 says. While there is insufficient evidence to recommend substituting nevirapine for efavirenz following either hepatotoxicity or cutaneous hypersensitivity.

The review looked at retrospective studies on switch between NNRTIs in the event of toxicity. Recurrent reactions occurred in 30 (12.6%) of 239 reported patients with rash who were switched from nevirapine to efavirenz, compared with eight (50%) of 16 patients switched from efavirenz to nevirapine. Hepatitis did not recur in either the 11 reported patients switched from nevirapine to efavirenz, or in the single reported patient who was switched from efavirenz to nevirapine.

The authors agreed with current WHO and US guidelines, that NNRTI substitutions should not be considered for life-threatening cutaneous reactions (e.g., Stevens-Johnson syndrome or toxic epidermal necrolysis), because there is a risk of recurrent rash. Patients discontinuing nevirapine for cutaneous reactions that are not life-threatening could be switched to efavirenz, but the limited evidence suggests that patients reacting to efavirenz should not be challenged with nevirapine. Switching from nevirapine to efavirenz following hepatotoxicity appears to be safe, but there is very limited evidence. The association between drug plasma concentration and hepatotoxicity is stronger with efavirenz compared with nevirapine. Furthermore, efavirenz hepatitis is very rarely associated with rash, by contrast with nevirapine. This suggests that there may be different mechanisms for hepatotoxicity occurring with nevirapine and efavirenz. Therefore, despite the limited evidence, we recommend that efavirenz can be used in patients who have discontinued nevirapine because of hepatotoxicity. Careful monitoring of liver function may be warranted, particularly in patients with severe hepatitis or with hepatitis B or C co-infection.

Reference
Mehta U, Maartens G.
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