

Niacin

Safety Considerations with Niacin Therapy

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Niacin has beneficial effects on plasma lipoproteins and has demonstrated clinical benefits in reducing cardiovascular events and atherosclerosis progression. The side effects of niacin, however, have limited its use in general clinical practice.


An understanding of cutaneous flushing based on the best available evidence should enhance patient education efforts and improve adherence. Although serious hepatic toxicity from niacin administration has been reported, it is largely confined to the use of slow-release formulations given as unregulated nutritional supplements.

Niacin has been shown to induce insulin resistance in short-term trials, but the glycemic response in subjects with and without diabetes is usually minor. Niacin can be used safely in patients with diabetes.

Despite a few case reports of myopathy associated with niacin-statin (3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitor) combination therapy, 2 decades of clinical evidence since the introduction of statins do not support a general myopathic effect of niacin either alone or in combination with statins.

Rare, less well-defined side effects of niacin include blurred vision due to cystoid macular edema, nausea and vomiting, and the exacerbation of peptic ulcers. Laboratory abnormalities that are usually small ($\leq 10\%$) and clinically unimportant include increased prothrombin time, increased uric acid, and decreases in platelet count and serum phosphorus.

Overall, the perception of niacin side effects is often greater than the reality. As a result, a valuable medication for cardiovascular risk is underused.

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