

Vitamin B derivative helps diabetics with mild kidney disease

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A vitamin B6 derivative may help slow or prevent the progression of mild kidney disease in patients with diabetes, according to a study appearing in an upcoming issue of the *Journal of the American Society Nephrology* (JASN). The drug may benefit increasing numbers of patients as the prevalence of diabetes rises.

Approximately 40% of all patients who need dialysis or a [kidney transplant](#) can blame diabetes for their kidney problems. Because the number of patients with [type 2 diabetes](#) is expected to double by 2030, the prevalence of kidney failure is sure to increase. New therapies that can delay the progression of [diabetic kidney disease](#) may help prevent [kidney failure](#) and save lives. Researchers have wondered whether the drug Pyridorin, a derivative of vitamin B6, may be such a candidate. Pyridorin targets several cellular processes that may be relevant to the progression of diabetic kidney disease.

Edmund Lewis, MD (Rush University Medical Center) and his colleagues within the Collaborative Study Group (a large clinical trial group comprised of various kidney care centers) tested the potential of Pyridorin (generic name pyridoxamine dihydrochloride) for treating patients with diabetic kidney disease.

For one year during the double-blind, randomized, placebo-controlled trial, 317 patients received placebo twice a day, Pyridorin at a dose of 150 mg twice a day, or Pyridorin at a dose of 300 mg twice a day.

Overall, the drug did not provide any benefit over placebo for slowing or preventing the progression of diabetic kidney disease; however, Pyridorin did help patients with only mild forms of the disease.

"It appears the drug may be beneficial in a sub-group of patients with only mild kidney disease but does not appear to be beneficial for patients with more advanced kidney disease," said Dr. Lewis. "The results warrant further trials in patients with mild diabetic kidney disease," he added.

More information: The article, entitled "A Randomized Trial of Pyridorin in Type 2 Diabetes," will appear online on Thursday, October 27, 2011, [doi:10.1681/ASN.2011030272](https://doi.org/10.1681/ASN.2011030272)

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