

ACE Inhibitors Found To Treat Diabetic Nephropathy

Brigham & Women's Hospital





For those with high blood pressure, angiotensin-converting enzyme inhibitors (ACE inhibitors) are a dream come true. By opening arteries, these drugs lower blood pressure and the resultant strain on the heart.

But it turns out that ACE inhibitors yield other medical benefits as well. Barry Brenner, M.D., of Brigham and Women's Hospital in Boston and Ronald D. Smith, M.D., formerly of Merck & Co., Inc. found that ACE inhibitors can benefit those suffering from diabetic nephropathy.

Diabetic nephropathy is one of the potentially serious complications associated with diabetes, and it stems from uncontrolled high blood sugar. High blood sugar levels can damage nephrons — the miniscule tube-like units that filter fluid and other substances from the blood stream. If left unchecked, diabetic nephropathy can lead to kidney failure.

Diabetic nephropathy is the leading cause of kidney failure in Americans, affecting up to 40 percent of those with diabetes.

The scientists discovered that by lowering blood pressure, one could also lower pressure in the glomerulus — the cluster of capillary blood vessels that filter blood in the kidney. As a result, kidney life can be prolonged indefinitely in many patients suffering from diabetic nephropathy. Today, kidney patients around the world are treated with ACE inhibitors.

This story was originally published in 2007.

To see available technologies from research institutions, click here to visit the AUTM Innovation Marketplace.

Share your story at autm.net/betterworldproject

#betterworldproject