



## Effects of beraprost sodium on renal function and inflammatory factors of rats with diabetic nephropathy

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Genet. Mol. Res. 13 (2): 4154-4158 (2014)

Received November 19, 2012

Accepted November 13, 2013

Published June 9, 2014

DOI <http://dx.doi.org/10.4238/2014.June.9.1>

**ABSTRACT.** Beraprost sodium (BPS) is a prostaglandin analogue. We investigated its effects on rats with diabetic nephropathy. There were 20 rats each in the normal control group (NC), the diabetic nephropathy group (DN), and the BPS treatment group. The rats in DN and BPS groups were given a high-fat diet combined with low-dose streptozotocin intraperitoneal injections. The rats in the BPS group were given daily 0.6 mg/kg intraperitoneal injections of this drug. After 8 weeks, blood glucose, 24-h UAlb, Cr, BUN, hs-CRP, and IL-6 levels increased significantly in the DN group compared with the NC group; however, the body mass was significantly reduced in the DN group compared with the NC group. Blood glucose, urine output, 24-h UAlb, Cr, hs-CRP, and IL-6 levels were significantly lower in the BPS group than in the DN group; the body mass was significantly greater in the DN group. Therefore, we concluded that BPS can improve renal function and protect the kidneys of DN rats by reducing oxidative stress and generation of inflammatory cytokines; it also decreases urinary protein

excretion of rats with diabetic nephropathy.

**Key words:** Beraprost sodium; Diabetic nephropathy; Renal function; Inflammatory factors