

db/db mice에서 Celastrol 투여가 대사변화 및 신질환에 미치는 영향

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Celastrol Attenuates Metabolic Disturbances and Renal Injury in db/db Mice

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Celastrol is natural biologically active compound that was originally identified from traditional Chinese medicine (Thunder of God Vine) and has attracted great interest recently, especially for its anti-inflammatory and anti-cancer activities. Previous studies have identified several molecular targets which are mostly centered on the inhibition of IKK-NF- κ B signaling. The aim of this study was to investigate the potential beneficial effects of celastrol on metabolic disturbances and renal injury in db/db mice.

Experimental animals at 8 weeks of age were injected with daily 1 mg/kg celastrol and vehicle intraperitoneally for 2 months. In celastrol-treated group, there were significant improvement in the levels of fasting blood glucose, HbA1c, insulin resistance and plasma lipid levels. Moreover, celastrol-injected diabetic mice showed significantly reduced urinary albumin excretion compared with vehicle-injected diabetic mice. Our data suggest that celastrol treatment improves insulin resistance, dyslipidemia and renal injury in type 2 diabetic model mice.

Key Words: 당뇨, 알부민뇨, 인슐린저항성

Diabetes, Albuminuria, Insulin resistance