Effect of Cernitin pollen-extract on the Sex-hormone-induced Nonbacterial Prostatitis in Rats

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Cernitin pollen-extract (Cernilton®, CN-009) is a preparation made from eight kinds of pollen. The active components are water-soluble (T60) and fat-soluble (GBX) fractions. CN-009 has been used for the treatment of chronic prostatitis in Europe and Japan. To study the action of CN-009 on the prostatitis, we examined the effect of CN-009 on the sex-hormone-induced nonbacterial prostatitis in rats.

Aged Wistar rats (10 months old) were castrated and then injected 17β-estradiol (0.25 mg/kg, s.c.) for 30 days. These treatments reduced the weight of prostate and induced the inflammation and epithelial cell dysfunction of the lateral prostate lobe in the rats. Testosterone (2.5 mg/kg, s.c.) injected for the last 14 days of the treatment of 17β-estradiol to the rats restored markedly the estradiol-induced prostatitis. Those changes were similar to the findings reported by others. CN-009 was administered orally for the last 14 days of the treatment of 17β-estradiol to the rats. The administration of 378 mg/kg of CN-009 did not change in the prostatic histopathological findings, while 1260 mg/kg of CN-009 increased the number of intracellular secretory granules of epithelial cells and diminished weakly the invasion of inflammatory cells into the lumen or the stroma in the prostatic gland.

These results suggest that CN-009 may recover the prostatic epithelial cell dysfunction and have the mild anti-inflammatory properties.

**Key Words:** Cernitin pollen-extract, Cernilton, CN-009, Aged Wistar rat, Castration, Sex-hormone-induced nonbacterial prostatitis