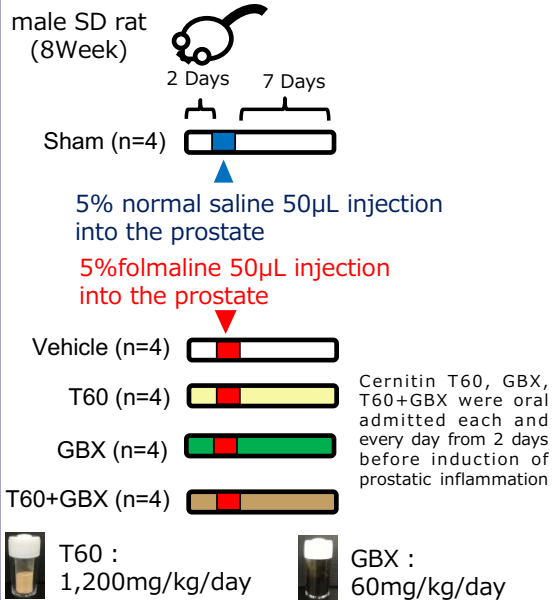




AIMS OF STUDY

- The treatment of non-bacterial prostatic inflammation still has not been established.
- Cernitin pollen extract (composed of Cernitin T60 and Cernitin GBX) improves human male LUTS of prostatic inflammation, nevertheless the detailed mechanism of that is unknown.
- Therefore, we investigated the effect of Cernitin pollen extract in a rat model with nonbacterial prostatic inflammation.

MATERIALS AND METHODS

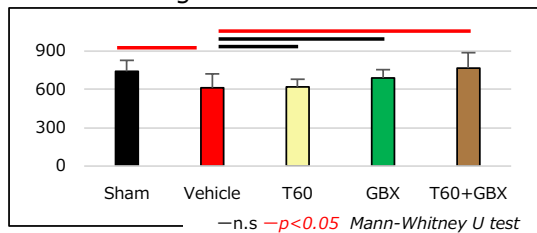


On day7

- The voiding volume and voiding interval under free behavior
- The evaluation of mRNA expression of inflammatory cytokines in prostate
- The histological analysis (Hematoxylin-Eosin Stains)

RESULTS 1

[Mean Voiding volume under free behavior]

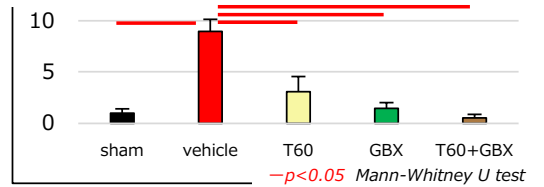


- The mean voiding volume was increased in T60+GBX group compared with vehicle group.

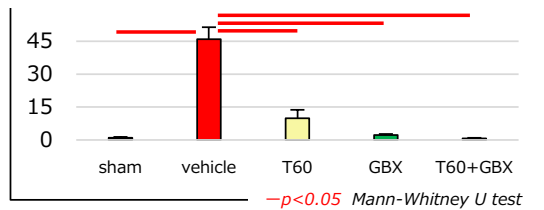
RESULTS 2

[mRNA expression in prostate]

Relative mRNA expression of IL-1β to GAPDH in prostate

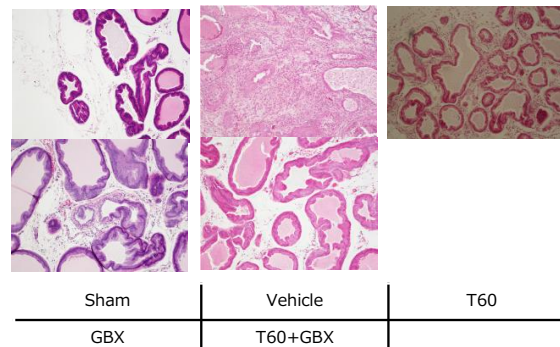


Relative mRNA expression of NLRP3 to GAPDH in prostate



- mRNA expression of IL-1β and NLRP3 were significantly increased in vehicle group compared with sham group. In contrast, those of them were decreased in T60, GBX and T60+GBX group compared with vehicle group.

[Hematoxylin Eosin Stain of Prostate]



- Neutrophils in prostatic stroma were increased of vehicle group compared with sham group. However, neutrophils were decreased in T60, GBX, T60+GBX order.

CONCLUSIONS

- In mRNA expression of inflammatory cytokines in prostate, Cernitin T60, GBX and T60+GBX each improved nonbacterial prostatic inflammation in short term. And The improvement rate were larger in T60, GBX, T60+GBX order.
- In the H-E stain, the same result was shown in the prostate.
- However, to improve the mean voiding volume in short term, T60 and GBX combination was needed.

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- Effects of Cernitin Pollen-Extract on Inflammatory cytokines in Sex-Hormone-Induced Nonbacterial Prostatitis Rats., Asakawa et al., Acta Urol. Jpn. 47: 459-465, 2001