Subject: DHT-Entwicklung unter Fin+Ari (Studie) Posted by Cynic on Fri, 06 Feb 2009 11:28:01 GMT

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Keywords

5-alpha-reductase inhibitor; aromatase inhibitor; intact canine prostate

Abstract

BACKGROUND

Our aim was to assess the effect of dual inhibition of 5-alpha-reductase and aromatase on prostate glands.

METHODS

We investigated the morphological changes in the prostate gland and the changes in the hormonal environment after administration of finasteride and arimidex to intact canine specimens. The study consisted of four groups: a 5-alpha-reductase only group (5RI only, n = 5); a 5RI plus aromatase-inhibitor combination group (5RI + ARI combination, n = 5); a BPH control group (n = 3); and a castration control group (n = 3). Finasteride (1 mg/kg/day) and the same dose of arimidex were orally administered for 80 days.

RESULTS

In the 5RI group, a significant decrease in the serum dihydrotestosterone (DHT) level was found, and prostatic volume was significantly decreased. However, significant increases in serum testosterone (T) and DHT levels were observed, with a concomitant increase in prostatic volume in the 5RI + ARI combination group. Morphometric analysis showed that histopathological findings in the 5RI + ARI combination group were similar to those in the BPH control group.

CONCLUSIONS

Dual inhibition of 5-alpha-reductase and aromatase resulted in a significant increase in prostate volume, accompanied by a 3-10-fold increase in serum testosterone levels and a significant increase in testicular volume. Prostate 37:70-76, 1998. © 1998 Wiley-Liss, Inc.