

论著

丙酸睾酮对去势beagle犬前列腺上皮细胞的影响

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摘要 目的 探讨丙酸睾酮与犬前列腺上皮细胞生长的关系。方法 去势beagle犬经丙酸睾酮处理后, 获取前列腺组织, 利用放射免疫分析法(RIA)测定前列腺组织中双氢睾酮(DHT)含量。组织经石蜡包埋切片, HE染色, 显微镜下观察前列腺的组织学变化, 并借助显微图像分析技术测定前列腺腺腔大小及腺上皮细胞高度。免疫组织化学技术检测前列腺上皮细胞前列腺特异抗原(PSA)及酸性磷酸酶(PAP)的表达。结果 去势犬经丙酸睾酮处理后, 前列腺中DHT水平明显升高。光镜下前列腺腺腔增大, 腺上皮细胞增高。图像分析结果显示前列腺腺腔面积明显增大($P<0.01$), 增大后面积分别为对照组的4.5~7倍, 腺上皮细胞高度明显增高($P<0.01$), 细胞增高幅度分别为对照组的4~8倍。免疫组化结果显示丙酸睾酮处理组前列腺上皮细胞PSA表达高于对照组($P<0.05$), PAP的表达也高于对照组($P<0.05$)。结论 去势犬前列腺上皮细胞生长及功能正常发挥依赖于雄激素, 剥夺雄激素导致前列腺上皮细胞萎缩。

关键词 睾酮 前列腺 上皮细胞 犬, beagle

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Effect of testosterone propionate on prostatic epithelial cell in castration beagle canine

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Abstract

AIM To make clear the relationship between testosterone propionate(TP) and the growth of prostatic epithelial cell in castration beagle canine. **METHODS** The prostates were extracted from the castrated beagle canine which have been treated with TP. Dihydrotestosterone(DHT) in prostate was detected by radioimmunoassay(RIA), the slices of prostate(4 μm) were stained with H&E investigated under microscope, and the acinar lumial area and the height of epithelial cell were measured with videodensitometer. The expression of prostatic specific antigen(PSA) and prostatic acid phosphatase(PAP) of epithelial cell was determined by immunohistochemical method. **RESULTS** DHT level of prostate was increased in TP treated groups. Under microscope, the acinar luminal area of prostate was enlarged and the height of epithelial cell was increased in TP treated groups. The microimage analysis showed that the acinar luminal area of prostate in TP treated groups enlarged significantly ($P<0.01$), the area was 4.5—7 times of that of control; the height of epithelial cell also was 4—8 times of that of control($P<0.01$). In TP treated groups, the expression of PSA and the expression of PAP of epithelial cell were higher than that of control($P<0.05$). **CONCLUSION** The growth and functions of epithelial cell of prostate from castrated canine were depended on androgen, and the epithelial cell would be atrophied if it was deprived of androgen.

Key words testosterone prostate epithelial cell canine beagle

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