Effect of testosterone and its antagonists on knee range of motion through RXFP1 and RXFP2 regulation in rat model (911.12)

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Abstract

Objective: To elucidate the testosterone hormone influences on knee joint range of motion (ROM), and the suppressory role of its antagonists: flutamide and finasteride on relaxin receptors in the patellar tendon and collateral ligament.

Methods: forty-two ovariectomized females Wistar Kyoto (WKY) rats 8–10 weeks, 180–200g of weight were distributed into seven groups. Peanut oil as a control, testosterone hormone (125 & 250 μg/kg), flutamide (10 mg/kg), and finasteride (20 mg/kg) separately in presence of two testosterone doses were injected subcutaneously for three consecutive days. The antagonists were administrated 30 minutes before the testosterone injection. Following the treatment