

**Testosterone can ameliorate cognitive impairment
in an animal model
of hypogonadism**

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To verify the effects of castration and testosterone substitution on cognitive performance.

Methods: For this purpose, twenty four adult male albino rats were divided into 4 groups; control (group I), castrated non treated rats (group II), castrated rats followed by immediate daily injections of testosterone (group III) and castrated rats followed by daily testosterone injections 3 weeks post surgery (group IV). Cognitive performance using water maze was tested preoperative and 5 weeks post surgery. Data were collected and represented in graphs.

Groups II and IV showed impaired cognitive performance. Meanwhile, rats of group III showed normal cognitive performance compared to that of controls.

Castration caused impaired cognitive performance. Early administration of testosterone would prevent these effects. However, late administration of testosterone showed no protective role which may indicate irreversible damage.