ABSTRACT

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ABSTRACT

Increase in proceptivity/sexual motivation by melanotan-II (MT-II) in female rats

OBJECTIVES

To investigate the effects of MT-II on proceptive (darts, hops and ears wigglings and solicitations) and receptive (lordosis) behaviors in ovariectomized female rats with a hormonal supplementation.

METHODS

Female Long Evans rats (250-275 g) were bilaterally ovariectomized (OVX) and progesterone (P 500 µg at 4-5 h before testing) in a volume of 0.1 ml/rat. Females received four preliminary tests of paced mating in the unilevel chambers.

For each mount lordosis reflex, darts and hops and ear wigglings displayed by the male were noted. Solicitations (head/hair orientation to the male followed by an abrupt runaway, regardless of whether the female remained in the side of the male or not) were also scored.

RESULTS

No effects of MT-II (1 and 3 mg/kg) on lordosis, as compared to saline. Ear wigglings were significantly increased after injection of MT-II (1 and 3 mg/kg), as compared to saline.

SUMMARY OF RESULTS

Our data demonstrated that MT-II at 1 and 3 mg/kg increased female rat sexual proceptive behavior in darts and hops that is the most common soliciting behavior displayed by females (Erskine, 1989). Ear wigglings were also increased with MT-II (1 and 3 mg/kg).

CONCLUSION

Melanocortin receptors agonist may represent an interesting target for the treatment of women with hypoactive sexual desire.