ABSTRACT

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

Anne-Sophie Rösler, Jacques Bernabé, Laurent Alexandre, Stéphane Droupy, Gérard Benoit, François Giuliano. 1,2*

1 PELISSIER iMÉ Laboratories, Gif-sur-Yvette, France / Medical University of Paris South Research Group in Urology, Le Kremlin-Bicêtre, France 2 e-mail address: gaselles@cyber-bouquet.org

ABSTRACT

Introduction and Objective: In women, sexual arousal is separated into two categories: genital (potency) and psychological (libido, motivation). They are anatomically distinct and may be linked to the role of melanocortin receptors (MCR) in the control of female sexual behavior, including sexuality and proceptivity. MCR is a cyclic peptide analog of alpha-melanocyte-stimulating hormone with agonist activity at four of the five known MCR: MC1R, MC3R, MC4R and MC5R. A potent initiator effect of MT-II on penile erection in men with erectile dysfunction has been reported. We investigated the effects of MT-II on appetitive behavior in female rats.

Methods: Ovariectomized Long Evans rats were injected subcutaneously (s.c.) with EB and P (10 and 500 µg in 0.1 ml of paraffin oil, volume of 0.1 ml/rat) in volume of 0.1 ml/rat (Plaus et al., 2004).

RESULTS

OBJECTIVES

Female Long Evans rats (250-275 g) were bilaterally ovariectomized (OVX) under isoflurane anesthesia. E ovx rats were injected s.c. with EB and P (10 and 500 µg in 0.1 ml of paraffin oil, volume of 0.1 ml/rat) in volume of 0.1 ml/rat (Plaus et al., 2004).

Proceptive and receptive behaviors were evaluated in unilevel chambers (60 L × 40 W × 20 H cm) divided by a transparent Plexiglas wall during dark phase of light-dark cycle. Three regular spaced openings in the separation wall allowed the female free passage between the halves. 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 female were noted. Solicitations (headwise 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.

SUMMARY OF RESULTS

CONCLUSION

REFERENCES

To visit the effects of MT-II on proceptive (darts and hops, ear 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) under isoflurane anesthesia.

Proceptive and receptive behaviors were evaluated in unilevel chambers (60 L × 40 W × 20 H cm) divided by a transparent Plexiglas wall during dark phase of light-dark cycle. Three regular spaced openings in the separation wall allowed the female free passage between the halves. 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 female were noted. Solicitations (headwise 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.

SUMMARY OF RESULTS

CONCLUSION

REFERENCES

To visit the effects of MT-II on proceptive (darts and hops, ear 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) under isoflurane anesthesia.

Proceptive and receptive behaviors were evaluated in unilevel chambers (60 L × 40 W × 20 H cm) divided by a transparent Plexiglas wall during dark phase of light-dark cycle. Three regular spaced openings in the separation wall allowed the female free passage between the halves. 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 female were noted. Solicitations (headwise 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.

SUMMARY OF RESULTS

CONCLUSION

REFERENCES

To visit the effects of MT-II on proceptive (darts and hops, ear 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) under isoflurane anesthesia.

Proceptive and receptive behaviors were evaluated in unilevel chambers (60 L × 40 W × 20 H cm) divided by a transparent Plexiglas wall during dark phase of light-dark cycle. Three regular spaced openings in the separation wall allowed the female free passage between the halves. 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 female were noted. Solicitations (headwise 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.

SUMMARY OF RESULTS

CONCLUSION

REFERENCES

To visit the effects of MT-II on proceptive (darts and hops, ear 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) under isoflurane anesthesia.

Proceptive and receptive behaviors were evaluated in unilevel chambers (60 L × 40 W × 20 H cm) divided by a transparent Plexiglas wall during dark phase of light-dark cycle. Three regular spaced openings in the separation wall allowed the female free passage between the halves. 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 female were noted. Solicitations (headwise 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.

SUMMARY OF RESULTS

CONCLUSION

REFERENCES

To visit the effects of MT-II on proceptive (darts and hops, ear 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) under isoflurane anesthesia.

Proceptive and receptive behaviors were evaluated in unilevel chambers (60 L × 40 W × 20 H cm) divided by a transparent Plexiglas wall during dark phase of light-dark cycle. Three regular spaced openings in the separation wall allowed the female free passage between the halves. 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 female were noted. Solicitations (headwise 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.

SUMMARY OF RESULTS

CONCLUSION

REFERENCES