**ELECTRICAL STIMULATION OF INTERMESENTERIC NERVES ELICITS PELVIC ORGASM-LIKE RESPONSE IN ANESTHETIZED FEMALE RATS**

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**ABSTRACT**

Compliance with ethical standards

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Peripheral regulation of organismic responses

**Organic reflexes regulated by somatic and autonomic nerves**

**Pelvic (somatic) nerves** relay sensory stimuli from external genitalia, perineum and pelvic floor musculature - sensory stimuli are essential for both pelvic (somatic) and hypogastric nerves (transmission of nociceptive stimuli from the uterus and genital organs). Reflexes mediated by pelvic and hypogastric nerves may be important in hormonal effects on pelvic musculature.

**RESULTS**

Pelvic floor muscle rhythmic contractions and transient rise in VP upon ES of the IMN.

**METHODS**

Adult female Wistar rats were used for the experiments. After standard surgical preparation under isoflurane anesthesia, the intermesenteric nerves (IMN) were exposed with the aid of a dissecting microscope and mounted on bipolar platinum electrodes connected to an electrical stimulator (AMS 2100, Phymep, France).

**CONCLUSION**

Female rats need to reach pelvic orgasm through direct genital stimulation compared to women with injury at or above T11.

We hypothesize that the presently observed ORCCs are a vestige of the rhythmic perineal muscle activity associated with orgasmic reflexes (Bohlen et al., Arch Sex Behav, 1982, 11:367), through spinal reflexes. ES of afferences in the IMN can elicit pubococcygeus muscle rhythmic contractions and transient rise in VP similar to the ones observed in women during orgasm (Bohlen et al., Arch Sex Behav, 1982, 11:367).

ES of the dorsal nerve of the clitoris (DNC) did not induce any post-stimulation pubococcygeus muscle rhythmic contractions or rise in VP in either intact or T8 spinalized rats.

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