

EFFECTS OF LOCAL ANESTHETICS ON PREGNANT UTERINE MUSCLES

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Obstetric analgesia and anesthesia should provide optimal pain relief for the parturient with minimal risks. The local anesthetic agents are most commonly used for obstetric analgesia and anesthesia.

We investigated the effect of local anesthetic agents: prilocaine, bupivacaine, ultracaine on myometrium in pregnant rats. In our study, we evaluated the effects of three local anesthetics at cumulative concentrations on contractions of myometrium isolated from pregnant rats. The following characteristics of the contractions were analyzed after the addition of drugs: frequency, mean duration, amplitude of each contractions and integrated area under the contraction curve.

We observed that the exposure to prilocaine, bupivacaine and ultracaine decreased amplitude, duration and integrated area under the contraction curve.

In conclusion, the study drugs at higher concentrations decreased contractions of myometrium, but all drugs at higher concentrations elevated the frequency.

Key words: *prilocaine, bupivacaine, ultracaine, pregnant myometrium*

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