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Title (type in CAPITAL LETTERS, leave one blank line before the text)	
<p>THE EFFECTS OF 7 WEEKS OF INTRAVAGINAL INTERMITTENT LOW FREQUENCY ELECTRO STIMULATION ON THE PELVIC MUSCLES OF THE UNAESTHETISED RAT.</p> <p><u>Aims of study</u> To investigate the effect of 7 weeks of intravaginal electrostimulation on the pelvic muscles of the unanaesthetised rat.</p> <p><u>Methods</u> The 'fast' pelvic muscles, pubococcygeus and iliococcygeus of the female rat were studied. Ten Wistar rats (200 gr.) were caught in chicken wire. Stimulation electrodes were introduced in the vagina with neutral gel and located under the pubic symphysis. Five rats get electrostimulation daily, 3 times 6 minutes, on/off 5/10, with 5 minutes rest between each period. This procedure was done 5 times a week for 7 weeks. A biphasic rectangular current of 400 <math>\mu</math>s, 25 Hz and 2 - 4 mA was used. Five rats underwent the same procedure but did not receive actual electrostimulation. Following evaluations were done = measurement of the intrarectal pressure at start and after 7 weeks (a 1 cm flat balloon filled with water till basic pressure 5 -15 cm H<sub>2</sub>O, connected to a membrane strain gauge transducer). At week 7 the muscles were prepared with fluid nitrogen and isopentane, cross sectioned at -25°C, air dried and processed for mATPase after preincubation at pH4,2, 4,6 and 9,2. The number of different types of fibres are counted under light microscope. The local Ethical Committee approved the study.</p> <p><u>Results</u> No pain reaction was noticed. Both groups showed an increase in intrarectal pressure development during follow up in 4/5 rats due to growing of the muscles. However in the stimulation group the pressure increase was stronger than in the sham group. The number of type 1 fibres did not change. The type IIa increased significantly in both iliococcygeus and pubococcygeus. The number of type IIb decreased concordantly. The capillary density in the stimulated group increased very much. The body weight of all the rats increased with 36 to 52 gr. during the experiments.</p> <p><u>Conclusion</u> Our experiment shows that repeated stimulation at low frequency of the pelvic floor muscles of the rat changes type 2B into 2A. Our results suggest an increase in muscle strength but not convincingly.</p>	