

P6. Influence of metoclopramide-induced hiperprolactnemia on the epiphyseal plate and type of collagen in the bone tissue of female mice and their offspring after breastfeeding

O P Araujo Jr (BR) [1], A S Araujo (BR) [2], M d Simões (BR) [3], E C Baracat (BR) [4], J M Soares-Jr (BR) [5], R C Gomes (BR) [6]

Objective: To evaluate the effects of hyperprolactinemia induced by metoclopramide on the epiphyseal plate of female mice and their offspring after breastfeeding. **Methods:** 20 female/groups: control group (Non-pregnant Ctr): 0.2 mL of saline (vehicle) and the experimental group (Non-pregnant HPrI): 200 μ g/day of metoclopramide, dissolved in vehicle. After 50 days, 10 females of each group were placed for mating with males and continued to receive treatment. The females non-pregnant were euthanasia on 50th day (experimental I) and the females pregnant and offsprings after 10th day of breastfeeding (experimental II). It's 8 groups in total: female mice non-pregnant control (GI), female mice non-pregnant treated (GII), female mice pregnant control (GIII), female mice pregnant treated (GIV), male mice and female mice offsprings of GIII (GV and GVI, respectively), male mice and female mice offsprings of GIV (GVII and GVIII, respectively). **Main Outcome Measure:** the animals (adult females and offsprings) were sacrificed after deep anesthesia and withdrew from the right knee in order to analyze the cartilaginous and bone tissue. Knees shape preserved in 10% formaldehyde, decalcification and then subjected to histological processing for inclusion in paraffin. Slides were stained by HE for morphometric analysis. The hormonal levels were assessed by ELISA and RIA. The results were subjected to statistical analysis by student-t. **Results:** female adult and female offspring showed an increase in the thickness of the zone of rest and the male offspring had increased in the hypertrophic zone. **Conclusion:** our data suggest hyperpolactinemia can change the thickness of articular cartilage in female adult and female offspring. Still, in male offspring can affect the epiphyseal growth of the bone.

[1] Federal University of SÃ£o Paulo , [2] Federal University of SÃ£o Paulo , [3] Federal University of SÃ£o Paulo , [4] Faculty of Medicine University of SÃ£o Paulo, [5] Faculty of Medicine University of SÃ£o Paulo, [6] Federal University of SÃ£o Paulo

