

Effect of administration of retinoic acid on the development of the axial skeleton in mouse embryos *Mus musculus* Efecto de la administración de Ácido retinoico sobre el desarrollo del esqueleto axial en embriones de ratón *Mus musculus*

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© 2014, Postgraduate Medical Institute. All rights reserved. The deficit and excess of vitamin A causes birth defects affecting different organ systems. The objectives of this study are to determine the effect caused by the administration of different doses of retinoic acid on bone morphogenesis of the axial skeleton in embryonic mouse *Mus musculus*. By simple randomization newly pregnant females were distributed into 4 categories: A, B, C and D. On day 8 post fertilization, 40 mg/kg was administered by weight of retinoic acid to the group A, 20 mg/kg body weight of the group B solution 1 ml/kg body weight of dimethyl sulfoxide and group C. Group D is the control group. On day 17 of gestation the females and their fetuses were anesthetized and euthanized with an overdose of intraperitoneal sodium pentothal. Fetuses from each litter were processed using diaphanization and Alcian blue staining to hyaline cartilage and alizarin to observe bone tissue. The results are expressed as percentag