

CALCIUM BLOCKER ISRADIPINE ENHANCES DENTAL GERM MINERALIZATION IN RATS

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An evaluation has been carried out on the effects of isradipide (Lomir®) on the offspring born from treated mothers and in particular, on the mineralization of the dental germ. **Material and Methods.** Sixteen female Wistar rats were treated with isradipine (1 mg/rat/day, oral route) and control experiments were run in parallel with untreated animals. The drug was administered along 35 days before mating and 20 days during pregnancy. Blood levels of calcium and phosphate were determined in mothers and newborns. The offspring's heads were prepared for dental germ histology. Results showed that isradipine enhanced uterine implantation (13%) and reduced the number of alive fetuses (17%), evidencing uterine reabsorption. Blood calcium and phosphate were not altered in either mothers or offspring. However, phosphate were significantly higher in newborn from treated mothers (106%) and in those from control rats (102%). No somatic malformation was observed. Histology of dental germ showed an enhanced dentinal matrix. **Conclusion:** Isradipine induced embryonic and/or fetal toxicity but was not teratogenic and enhanced offspring's dentinal matrix mineralization.

Key Words: Isadripide; dental germ; embryonic toxicity; fetal toxicity, wistar rats.