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MALFORMATIONS OBSERVED IN ALBINO MOUSE FETUSES MATERNALLY TREATED WITH THE ANTIFUNGAL DRUG "DINICONAZOLE"

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Abstract

The purpose of this study was to assess malformations induced in mice fetuses maternally treated with diniconazole. Pregnant female mice received daily oral doses of 15.63, 31.25, 62.5 mg/kg of diniconazole during the period of organogenesis. Examination of live fetuses on 18th day of gestation from diniconazole treated dams on 18th day of gestation showed marked fetal growth retardation, and a significant increase in the percent of the malformed fetuses per dam and percentage of dams with malformed fetuses. These malformations were clearly recorded in gross morphology and skeleton of the obtained fetuses. Skeletal malformations were observed in sternebrae, ribs and vertebral centra. Also, assessment of skeletal ossification of live fetuses revealed marked retardation in the major parts of the skeleton including the skull. The previously mentioned effects of diniconazole may be attributed to hormonal imbalance or genotoxic effects exerted by the used fungicide.

Keywords: Diniconazole; Malformation; Mice fetus

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