

The Teratogenic Effects of Bromadiolone on Rat Fetus

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Abstract

Aim and background .Bromadiolone is one of the well known toxic substances .Toxic effects of bromadiolone have been studied more on different organs of experimental animals .But studying the effects of the toxin on fetus and placenta is still insufficient .In this study ,we studied rat embryos exposed to bromadiolone in a short period .

Materials and Methods. Animals used in this study were Wistar rats. After the occurrence of pregnancy, female rats were placed in two groups, randomly (n=7). Bromadiolone was given to the experimental group animals on the day 5 of pregnancy in one turn in a dose of 0.11 mg/kg and then sterilized water was given to the control group. On the 15th day of pregnancy, rats were killed and embryos were taken out of the womb. Weight and diameter of embryos were measured and then embryos were used for histological and statistical studies.

Results. In the experimental group, there was no significant difference between fetal weight and size of experimented and control groups but in experimental group there were significant decreased in the number of embryos due to fetal atrophy ($p<0.05$). Hemorrhagic areas of the external structure in the experimental embryos and although, edema of gastric, intestinal lobe and liver was also seen.

Conclusion .These results showed that bromadiolone causes teratogenic malformation in the rat fetus.

Key words .Bromadiolone ,Teratogenic Effects ,rat Fetus

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