检测研究

御生堂减肥胶囊的急性毒性及致突变性

王庭欣 , 宋立江, 郭金铭, 蒋东升

河北大学质量技术监督学院, 河北 保定 071002

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摘要 背景与目的:测试御生堂减肥胶囊的急性毒性及致突变性。材料与方法:按《食品安全性毒理学评价程序和方法》进行了小鼠的急性毒性试验、小鼠骨髓细胞微核试验、小鼠精子畸形试验、大鼠30 d喂养试验及Ames试验。结果:小鼠LD50>215 000 mg/kg,小鼠骨髓细胞微核试验和小鼠精子畸形试验测试组和对照组相比差片均无显著性,Ames试验中不同剂量组在加S9和不加S9条件下的回变菌落数均未超过空白对照组回变菌落数的2倍;大鼠30 d喂养试验各剂量组动物生长发育良好,血液及生化指标均在正常范围内,各试验组与对照组比较差异无显著性,病理学检查结果肝、肾、胃、肠均正常。结论:御生堂减肥胶囊属无毒物质,致突变试验及30 d喂养试验均为阴性结果。

关键词 减肥胶囊; 急性毒性; 致突变性; 喂养试验

Mutagenicity and Acute Toxicity of Yushengtang Capsule

WANG Ting-xin, SONG Li-jiang, GUO Jin-ming, et al

The Collega of Quality and Technical Supervision of Hebei Univensity, Baoding 071000, China

Abstract BACKGROUND & AIM: To study mutagenicity and acute toxicity of Yushengtang capsule safety. MATERIAL AND METHODS: Mutagenicity and acute toxicity of Yushengtang capsule were studied by using LD50 in mice, Ames test, micronucleus in mice, sperm shape abnormality test and thirty days feeding study in rats. RESULTS: Acute toxicity test: LD50>215 000 mg/kg. Ames test: Yushengtang at four concentration of 1.0,2.0,3.0,4.0 mg/plate were studied by TA97(a),TA98,TA100,TA102 bacterial, at the same time mutagenic were used as the control groups. The test were repeated under the action of metabolic activated enzyme. The bacterial numbers at every concentrations of Yushengtang had no significant differences from the control groups. Micronucleus and sperm shape abnormality test in mice: Micronucleus rate at 5 000, 10 000, 20 000 mg/kg and positive were 2.0 ‰,1.6 ‰,1.8 ‰,2.0 ‰ and 32.6 respectively. Sperm shape abnormality rate at 5 000,10 000,20 000 mg/kg and positive were 19.4 ‰,19.8 ‰,19.8 ‰,22.4 ‰ and 128.4 ‰. Thirty days feeding test: The rats we thirty days. All index were normal. CONCLUSION: Yushengtang had no potential mutagenicity.

Keywords Yushengtang capsule; mutagenicity; acute toxicity; feeding test

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