ABSTRACT

The present study was conducted to investigate the effect of homeopathic medicine kali iodatum 30 in reversing the adverse effects of lead nitrate on skeletal muscles of rabbits. Fifty five male rabbits were divided into three groups. Group one served as normal control, group two lead intoxicated group which received 15 mg/kg b.w lead nitrate through intraperitoneal injections, group three lead intoxicated group simultaneously treated with 5 drops of kali iodatum orally on daily basis. 5 rabbits from each group were sacrificed after 2, 4 and finally after 5 weeks. Biceps brachi and soleus muscles were removed and subjected to biochemical and histopathological studies. Lead nitrate caused significant decrease in DNA, RNA and protein concentrations of biceps and soleus muscles. Lead nitrate caused histological changes including cell degeneration, focal loss of nuclei, and presence of inflammatory cells and focal collection of nuclei in both muscles. Lead intoxicated simultaneously kali iodatum treated group showed less decrease in DNA, RNA and protein concentrations of biceps and soleus muscles. Histopathological studies of this group showed mild degeneration and focal loss of few nuclei. These results indicate that kali iodatum is effective in reducing the muscle toxicity produced by lead nitrate.