

Abstract

Renal problems are currently on increase worldwide. Some factors suspected to be the cause of the renal problems are drug abuse. Hence, this study investigated possible renal toxicity effect of Khat in male albino mice. Khat alkaloids were extracted from fresh Khat shoots and leaves. The Khat extract were administered orally through intubation. Accordingly, forty- five albino mice (20 – 25g) were distributed randomly into nine groups (n = 5). Negative controls (NCs) received purely distilled water. Positive controls (PCs) received indomethacin at a dosage of 2mg/Kg/day as a twice dose per day. Test groups received Khat extract administered in combination of 2ml tea, 2ml water, 2ml milk, 2ml coffee, 2ml coke, 2g patico sweet and 2g groundnut. To each test group Khat extract was administered at a dosage of 2000mg/Kg/day for four weeks. Blood samples were collected from all animals for biochemical analysis after four weeks which included the renal function tests such as serum creatinine and blood urea nitrogen levels. The histological and cytological studies were done using H&E staining technique. There was an increased level of renal biochemical markers in all albino mice serum exposed to Khat extract. There was a significant different between levels of renal biochemical enzymes biomarkers at $p < 0.05$. There were signs of adverse effects of Khat on kidney of mice.