This study was aimed to determine the effect of polysaccharide krestine of *Coriolus versicolor* mushroom extract on subchronic toxicity tests on kidney histology and serum creatinine levels of mice (*Mus musculus*). Twenty four male mice aged 8-10 weeks, weight 25-30 g were used as experimental animals which were divided into four groups (1 controlled group and 3 treatment groups) which consisted of 6 animals for each. The first group was the controlled group (P0) that was given saline 0,1 mL by gavage for 62 days. After that, blood was taken for measuring creatinine level and taking the kidney for made histology and counted the normal, degeneration and necrosis of tubuli cell. The data was analyzed by *one way Anova* The results showed that the treatment group P1 had degeneration 13,64% and cell necrosis 4,90%. In the P2 amount of degeneration 10,80% and cell necrosis  15,56%. In group  P3 number of degeneration 15,32% and cell necrosis 21,18%. In the measurement of creatinine levels in the 4 groups obtained P0, P1 and P2 showed a normal creatinine each them are 0,53; 0,73; 0,8 mg/dL whereas on the P3 creatinine levels was 1,067 mg/dL. Giving polysaccharide krestine (PSK) of the extract of *C. versicolor* on subchronic toxicity test causing cell degeneration, necrosis on renal tubuli cell and on the dose of 6 mg/kg BB can increased serum creatinine levels of mice.

*Key words: *polysaccharides krestine, *Coriolus versicolor*, subchronic toxicity tests, renal histology, creatinine levels.