

ABSTRACT

Effects of some drugs on the elimination of excess iron from the artificially iron overloaded rabbits have been studied. Since the iron overloading in higher amounts become toxic, as it effects the liver and kidney functions adversely.

The GPT, GOT, bilirubin, creatinine, alkaline phosphatase and uric acid values have been studied and compared in iron loaded control and drug treated rabbits in addition to assaying for the quantities of iron in serum and tissues like liver, kidney and muscles.

The data shows an increase in the iron concentration in serum of rabbits and various tissues like liver, kidney and muscles after administration of 300 mg of extraneous iron in the form of iron sorbitol through intramuscular injections.

Due to iron over loading following changes in the animals were observed.

- a- Loss of activity
- b- Loss of weight
- c- Loss of hair &
- d- Increased heart beat

Liver and kidney functions were found disturbed due to iron overloading. A slight increase in creatinine and uric acid level in serum indicated the toxic effects of iron on kidneys.

Serum bilirubin level, which is considered a true test of liver function, was also found increased after iron over loading confirming the toxic effects of iron on liver. However the levels of GOT, GPT and alkaline phosphatase decreased due to iron overloading.

Treatment with drugs GCZI & GCZII proved effective as oral iron eliminator, as these drugs decreased the elevated levels of iron concentration in serum and tissues.

These drugs also decreased the levels of creatinine, uric acid and bilirubin (which were increased after iron overloading) near to normal after 25 days treatment. However these drugs increased the levels of GPT & GOT.

Alcohol also decreased the iron concentration in serum and tissues but less effectively than both drugs.