

SUMMARY

Ural M. Comparison of some acute phase protein levels in rats with experimentally induced infectious and noninfectious inflammation

Acute phase reaction is a nonspecific reaction that occurs infectious, immunologic, neoplastic, traumatic or parasitic causes. Most important features of acute phase reaction is the production of some acute phase proteins such as CRP, SAA, haptoglobin, ceruloplasmin, fibrinogen in liver.

In this study, it was investigated that the levels of acute phase proteins in rats with experimentally induced different inflammation models. In first groups rats were treated with 0,5 mg/kg turbentin oil (single dose, ip) for noninfectious inflammation. For infectious inflammation model, 21 rats that were in second group were treated by 10^6 CFU *Staph. aureus* (ip). 21 rats in control group were given FTS in same way. Additionally, blood samples were collected to 7 healthy animals for 0 days. Days of 1., 4. ve 7., blood samples were collected intracardiac way in randomly selected 7 rats under ether anesthesia and applied othenasia by cervical dislocation. Whole blood samples were used for fibrinogen analyses and blood counting; serum samples were analysed CRP, SAA, haptoglobin in ELISA reader, ceruloplasmin, total protein and albumin analyses were measuring by spectrophotometric methods. Serum protein fractions were determined with electrophoresis.

As a result of this study, haptoglobin, fibrinogen and ceruloplasmin levels were significantly increased in rats with acute infectious and noninfectious inflammation group when compare between blood samplind days and in day before induction. CRP and SAA levels were increased but were not determined any statistically significance. There were also observed that haptoglobin and fibrinogen concentrations were higher in infectious.

Key Words; Inflammation, infectious, noninfectious, acute phase proteins