The physiologic state induced by general anesthetics typically includes analgesia, amnesia, loss of consciousness, inhibition of sensory and autonomic reflexes, and skeletal muscle relaxation. The liver function is mainly homeostasis. Alanine aminotransferase (ALT), Aspartate aminotransferase (AST) are soluble cytoplasmic and mitochondrial enzymes widely used to assess hepatocellular damage. ALP Alkaline Phosphatase is membrane associated enzyme anchored to cell membrane in particular to the biliary canaliculus. ALP is found in most tissues but is derived predominantly from hepatic cells.

Aim of this study was to evaluation of liver enzymes (ALP, ALT, AST ) changes that accompany surgical operation under general anesthetic drugs.

A total of (36) patients under go surgical operations under general anesthesia.Blood samples were collected from patients just before and 24 hours after operation. The serum has been stored by deep freezing (-20°C) until used for serological tests to estimate the concentration of serum ALT, AST, ALP enzymes level. The results were significant increase in mean differences of serum ALT, AST, ALP enzymes level.

In conclusion this study showed that surgery and general anesthesia elevated serum level of ALT, AST, ALP enzymes.