

## **Effects of opium addiction on some serum factors of alloxan-induced diabetic rats.**

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**Abstract:** This study was carried out to determine the effect of opium on biochemical parameters in addicted rats. Traditional opium was given orally (10mg / kg body weight) to all experimental rats except the control negative (normal health) group for 30 days. Diabetes mellitus was induced in adult male albino rats, using intra- peritoneal injection of 120 mg / kg BW. Blood glucose, serum insulin, total protein, urea, creatinine, alanine aminotransferase (ALT), aspartate aminotransferase (AST), triglycerides (TGs) and total cholesterol were measured in the serum of rats. Serum total protein, ALT and AST were lower compared to non-addicted diabetic rats. Cholesterol and triglycerides tend to be lower in addicted diabetic rats. Creatinine and urea were higher in addicted diabetic rats compared to non-addicted diabetic rats. According to our results, opium increases serum insulin and decreases serum glucose but non-significantly, and thus adds to metabolic disorders in diabetic rats. These results suggest that opium reduces blood glucose in diabetic rats and the mechanism of this effect is unclear.