

Discussion

Drugs are an important cause of liver injury. Large number of drugs has been reported to cause liver injury. Drug-induced hepatic injury is the most common reason cited for withdrawal of approved drugs. Physicians must be vigilant in identifying drug-related liver injury because early detection can decrease the severity of hepatotoxicity if the drug is discontinued⁽⁶⁾.

In the present study, the histological sections of treated rabbits with dexamethasone showed areas of ballooning and vacuolation of hepatocytes, which were directly proportional to the duration and dose of treatment.

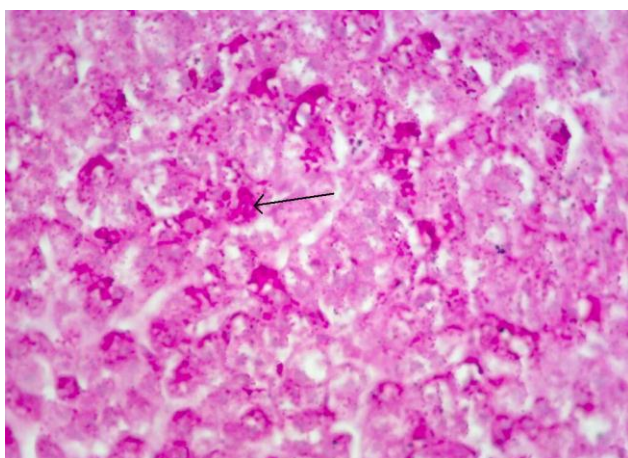


Fig. 6: Photomicrograph of treated rabbit liver cells with strong +ve PAS reaction (arrows) PAS X400.

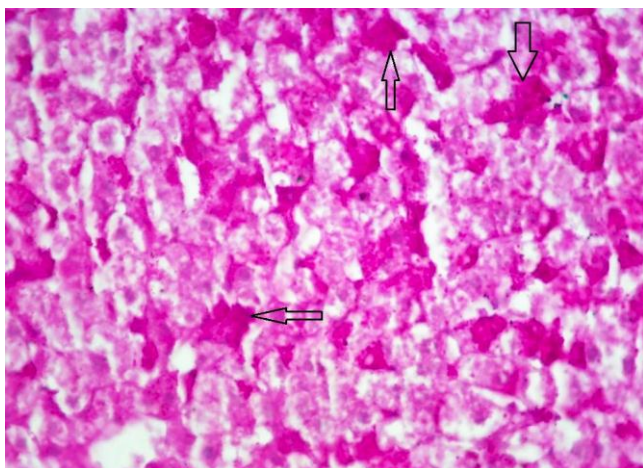


Fig. 7. Photomicrograph of treated rabbit liver cells with ++ve PAS reaction (arrows) PAS X400.

The histological sections stained with PAS showed that the vacuoles inside the hepatocytes

contain glycogen inside their cytoplasm, there were positive (+ve) PAS reactions in all of the treated groups, but with differences in the strength of positivity, with presence of dispread staining that indicated a +ve reaction to PAS.

Gradually, this staining became heterogenic and then appeared as clumped masses which indicate strongest reaction of glycogen to PAS, that differ in the different doses and duration used in this study. Some researchers⁽¹⁴⁾ stated that glycogen deposition was time and dose dependant and they indicated that repeated administration of dexamethasone increase liver weight and glycogen content and these changes were reduced by cessation of treatment.

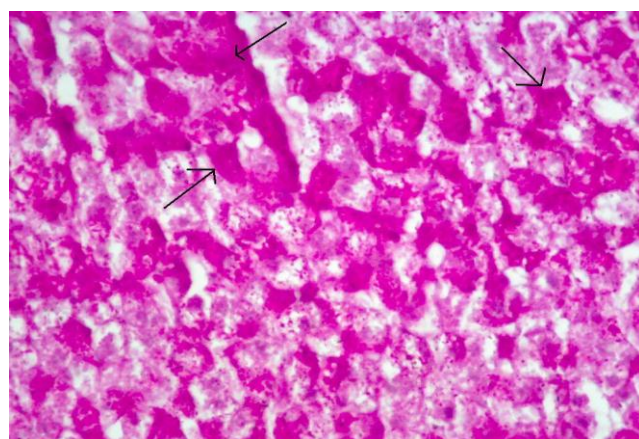


Fig. 8: Photomicrograph of treated rabbit liver cells with +++ve PAS reaction (arrows) PAS X400.

In the periphery (body organs outside the liver), glucocorticoids stimulate lipolysis and protein breakdown, releasing glycerol, fatty acids and amino acids, respectively, that act as substrates for gluconeogenesis⁽⁹⁾.

Table 1: Periodic Acid Schiff's stain (PAS) reaction of liver cells in the study groups.

Study groups	PAS reaction
First group	Strong +ve
Second group	++ve
Third group	Strong +ve
Fourth group	+++ve
Fifth group (control (1))	Weak +ve
Sixth group (control (2))	Weak +ve