

The histopatological changs of mice liver due to morphine adminstration

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Abstract

Background&Objective: Morphine is an opioid analgesic and has known effects on different organs. This study was done to determine the histopatological changes of liver due to morphine adminstration in adult mice.

Materials&Methods: In this experimental study, 20 male Blab/c mice divided experiment and control groups. In experiment and control group, animals recived 15mg/kg/day morphine and salin normal interperitoneally, for 21 days respectively. Day 22 the livers were dissected under anaesthesiology. Specimens were processed for histological study and stanied with H&E.

Results: In experimental group, small sites of necrosis with poly morphic inflammatory infiltration and debris formation of necrotized nucleus in death area, so hepatitis was suggested. Also accumulation of micro droplets of lipid inside the hepatocyte cytoplasm without nucleus displacement (fatty damages with small vacuoles) observed in cases. In addition, microvesicular steatosis and mouth teeth necrosis in liver parenchyma with inflammation in the vein and portal space were seen in cases. Any changes was not seen in control group.

Conclusion: The interperitoneal adminstration of morphine can cause histopatological changes in mice liver.

Key Words: Mice- Morphine- liver- Hepatitis- Histopatological changes