

P66. THE EFFECTS OF HIGH DOSE PARACETAMOL ON THYROID FOLLICULAR EPITHELIAL CELLS IN RAT

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‘Analgesic’ is the name given to any drug that is used to make an analgesic effect. Analgesic drugs act on the central and peripheral nervous system. There are many kinds of analgesics such as acetaminophen, narcotic drugs, synthetic drugs with the narcotic effect and nonsteroidal anti inflammatory drugs (NSAID).

Although the analgesic action mechanism is unknown, in many studies paracetamol causes dose dependent significant liver and renal toxicity, but is still used without consideration. In this study we aimed to determine the toxic effects of paracetamol on thyroid follicular epithelial cells.

For this purpose, a total of 25 female Wistar albino rats divided into 5 groups which are the control group (not treated) and paracetamol groups (P7, P14, P21, P28). 750 mg/kg/day paracetamol was given to paracetamol groups via gavage technique until the day they were sacrificed. After light microscopic histological examination cytoplasmic vacuolisation, follicular and colloidal degeneration were detected in paracetamol groups. The average follicular diameter measurement of the tissue sample sections of the morphometric evaluation of the control group (57.23 ± 6.45) and the group P7 is examined statistically significantly ($p < 0.05$). The average height of follicle epithelial of the control group (0.20 ± 2.19) and the differences were observed statistically significant between the other groups ($p < 0.05$).

In conclusion, based on the results of histological analysis we support that 750 mg/kg/day dose of paracetamol have toxic effects on thyroid tissue depending on the duration of use.

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