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A Study on the Effects of Prolactin and Its Abnormalities on Semen Parameters of Male White Rats

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Abstract : Male factor infertility due to endocrine disturbances such as abnormalities in prolactin levels are encountered in a significant proportion. This case control study was carried out to determine the effects of prolactin on the male reproductive tract, using 200 male white rats. The rats were maintained as the control group (G1), hypoprolactinaemic group (G2), 3 hyperprolactinaemic groups induced using oral largactil (G3), low dose fluphenazine (G4) and high dose fluphenazine (G5). After 100 days, rats were subjected to serum prolactin (PRL) level measurements and for basic seminal fluid analysis (BSA). The difference between serum PRL concentrations of rats in G2, G3, G4 and G5 as compared to the control group were highly significant by Student's t-test ($p<0.001$). There were statistically significant differences in seminal fluid characteristics of rats with induced prolactin abnormalities when compared with those of control group (p value <0.05), effects were more marked as the PRL levels rise.

Keywords : male factor infertility, prolactin, seminal fluid analysis, animal studies
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