



Figs. 11–13. Electronic micrographs of the seminiferous epithelium (5000 \times). Number 1 marked the vacuoles; 2 marked lysosome; 3 marked lipofuscin. (Fig. 11) Sample from the control group. (Fig. 12) In the NP1 group, intracellular vacuoles increased dramatically; lipofuscin and lysosome increased. (Fig. 13) The NP2 group showed smaller vacuoles combined into a huge vacuole; increase and inflation of lysosomes were also observed and lipofuscin increased.

negative feedback manner, we deduced that down-regulated testosterone levels in NP groups resulted in the excess secretion of LH. In Nagao's study, 8-week-old male rats were treated with 250 mg/kg/day NP for 12 weeks [13]. Decreases of testosterone level and increases of FSH level were observed, but the LH level remained unchanged, which was different from our present study.

Thus, the present data show that relative high dose NP can exert a generally chronic toxicity to rats and a particular toxicity to epididymis, induce the apoptosis of testicular cells (including Sertoli cells and germ cells), and indirectly disturb the secretions of testosterone, LH and FSH and the production of sperm.

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