

# Alkylating Agents and Mouse Spermatogenesis: Effects of a Single Dose of Cyclophosphamide

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Summary: Cyclophosphamide (CFA) is one of the alkylating agents which has now been used with some success in the treatment of human neoplasias and renal disease. To evaluate how this drug could affect the seminiferous epithelium, a single dose of CFA (200 mg/kg/weight) was given to twenty adult mice (strain A/Sw). The effect of the drug was compared with a control group to which physiological saline solution was injected. Mice were sacrificed by cervical dislocation at four different time intervals after the drug administration in order to evaluate the action of the drug in different stages of spermatogenesis. The effect of the drug was appreciated as soon as four days after its administration. The initial damage to the epithelium was characterized by vacuolization of the Sertoli cells. Of all germ cells, primary spermatocytes showed the highest sensitivity to the drug. A high percent of teratozoospermia in the experimental group, when compared to the control group, was observed at all