**Abstract.** We had studied changes of Wistar rat germinal epithelium after aplication MDOC<sup>TM</sup> in the form of gel applied to experimentally injured testicular peak. Our experiment had lasted for twelve days. Operated testicles was not reduced in size significantly compared with controls. There were apoptotic and multinuclear cells in seminiferous tubules. We recorded numerous populations of testicular macrophages and their phagocytic character. There were also Langhans giant cells. We observed significant infiltration of immune system cells in the apical part of operated testicles in focal way. Infiltration showed character of chronical inflammation. MDOC<sup>TM</sup> probably caused these changes by its chemotactic effects.