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## JOURNAL ARTICLE

# Studies on sperm chromatin structure alterations and cytogenetic damage of mouse sperm following in vitro incubation. Studies on in vitro-incubated mouse sperm

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Mouse epididymal sperm incubated in Tyrode's T6 fertilization media were analyzed over time for chromosome damage by two methods. First, cytogenetic analysis was done on paternal pronuclei metaphase chromosomes. After 6 hours incubation 11% of the cells demonstrated chromosome structural abnormalities. Secondly, sperm nuclei were measured by the sperm chromatin structure assay, which is a measure of the susceptibility of sperm DNA to the nuclei demonstrated an increased susceptibility to DNA denaturation, reaching near 100% by 48 hours. Changes in chromatin structure at the molecular level may lead to chromosome breaks seen in pronuclear chromosomes.

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