Low-dose exposure to Bisphenol A during development has limited effects on male reproduction in midpubertal and aging Fischer 344 rats

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Low doses of Bisphenol A (BPA) during development may affect reproduction. In this study, Fischer 344 rats were exposed to 0.5 or 50 μg BPA/kg bw/day via drinking water from gestational day 3.5 to postnatal day 22. Anogenital distance, organ weight, histopathology of reproductive organs, hormone analysis and sperm morphology were evaluated in male offspring. In this study no major effects of BPA on male reproduction in midpubertal (postnatal day 35) or adult (12-month-old) rats were revealed, apart from a higher prevalence of mild inflammatory cell infiltrate in cauda epididymis in adult rats exposed to 50 μg BPA/kg bw/day. No BPA-related effects on sexual development were seen but care should be taken when evaluating histopathology in midpuberty testis due to large morphological variation. Results from the present study show no major signs of altered male reproduction in rats exposed to low doses of BPA during gestation and lactation.

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