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JOURNAL ARTICLE

Effects of neonatal estrogen administration on rat testis development with particular reference to Sertoli cells

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An ultrastructural and morphometric study of the testes in 15-, 22-, 45-, and 90-day-old neonatally estrogenized rats was performed. At 45 days of age, the Sertoli cells appeared immature in estrogenized rats, whereas they were fully mature in the controls. This finding might be related to a deficiency in gonadotropins and androgens during the postnatal period. In 90-day-old estrogenized rats, however, Sertoli cell maturation had occurred, which might be attributed to a recovery of hormone levels. Cytoplasmic alterations, however, such as vacuolation, were present at this age. The morphometric study revealed decreased testicular and tubular volumes as well as decreased mean tubular diameters in the estrogenized animals. In contrast, the absolute tubular length increased more in these animals than in the controls during the period from 15 to 90 days of age. This lengthening process might be related to the large number of hypercurved tubules in the estrogenized rats.

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Abnormalities in Functional Development of the Sertoli Cells in Rats Treated Neonatally with Diethylstilbestrol: A Possible Role for Estrogens in Sertoli Cell Development
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