

# Histophysiological and morphometric studies of the postnatal development of rat vas deferens

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Summary. The postnatal growth and differentiation of the vas deferens was studied in rats aged 1-180 d by light, and with transmission electron microscopy in parallel with a radioimmunoassay of serum testosterone. During the first week and the major part of the second week of the postnatal life the vas deferens presented embryological features. Differentiation of the proximal and distal segments of the vas started 12 d after birth. At 25 d, the epithelium of the mucosa in the distal segment already showed some adult histologic characteristics. The weight notably increased between 1 and 45 d and the higher rates of growth of their histologic components occurred until 45 or 60 d, in parallel to testosterone serum levels. These results suggest that growth and differentiation of the vas deferens are androgen-dependent events and precede the end of the first spermatogenic cycle, assuring the viability of spermatozoa that will enter the duct. 1993 Blackwell Verlag GmbH