

The Aging Kidney - a Quantitative Study on Superficial and Juxtamedullary Nephrons in Wistar Rats

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Renal senescence is characterized by numerous morphological alterations, which are associated with reduction in the renal functional capacity. Glomerulosclerosis is a nonspecific feature observed in the normal process of aging, as well as in pathological conditions such as hypertension and diabetes. In literature, two types of sclerotic glomeruli have been described, based on their light microscopic appearance. However, the qualitative evaluation of the glomerular changes is sometimes not sufficient for distinguishing the etiology of the kidney damage. The present study represents a detailed morphometric study on the postnatal changes in the areas of the renal corpuscles and glomerular capillary tufts of the superficial and juxtamedullary nephrons in Wistar rats.

Key words: glomerulosclerosis, renal corpuscles, morphometry, Wistar rat