Morphometric and immunocytochemical study of the fetal, infant, and adult human vas deferens

Regadera, Javier

España, Gabriel

Roias, Mariana A.

Recio, Juan A.

Nistal, Manuel

Suárez-Quian, Carlos A.

The human vas deferens (VD) is often considered simply as a conduit to transfer mature sperm from the epididymis to the ejaculatory duct. The cells that make up the epithelium of the VD, however, exhibit many characteristics of cells found in more complex epithelia, which are involved in absorption and/or secretion. In the present investigation, morphometry was utilized to characterize in detail the changes incurred by the human VD during its development, growth, and aging and to determine if these changes correlate with testicular maturation. In addition, the specific types of keratins present in the epithelial cells were defined, as well as desmin distribution in the muscular layers, during the various phases of the development, growth, and involution of the human VD. Results of the morphometric study are consistent with the interpretation that the development, growth, and aging of the VD are delayed, but parallel to, the identical phases exhibited by the human testis. Further, a dif