# Structure and concentration of elastic system fibers in the glans penis of young men

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The extracellular matrix is a key element in penile function and pathology, yet little is known of its structure in human glans penis. Herein we investigated the morphological organization and volumetric density (Vv) of elastic fibers in the glans penis of potent men. Penile glans specimens taken from the autopsies of 5 young men ranging in age from 18 to 30 years (mean = 24), died of causes not related to the urogenital system. Formalin-fixed, paraffin-embedded tissue samples were then stained with Weigert's Fucsin-Resorcin, for quantitative evaluation of the elastic system fibers, stereological methods were used. These quantities were expressed (%mean) as volumetric densities (Vv) and were determined on 25 random fields for each individual using an M-42 test system. Results: Connective tissue elements, mainly elastic system fibers, were abundant. These fibers often had a tortuous profile and surrounded sinusoids in the glans penis. An irregular elastic fiber network was distributed beneath the glans penis mucosa, on the other hand, underneath the mucosa, the elastic fibers were observed longitudinal at corpus spongiosum. The percentage of the elastic system fibers in the glans penis herein analyzed is: 29.4% ± 3.1. The data should therefore provide important information for devising comparisons with patients with ED. The results reported herein provide the base for continuous investigations on extracellular matrix by stereology.