

Lymphology 28 (1995) 35-40

## **THE LYMPHATIC VESSELS AND THEIR RELATIONSHIP TO LYMPH FORMATION IN THE HUMAN URINARY BLADDER**

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### *ABSTRACT*

*After endoscopic transurethral biopsies of normal human urinary bladder, an extensive network of small initial lymphatic vessels was depicted by means of light and electron microscopy. Using light microscopy, lymphatic vessels were seen in the mucosa and submucosa and formed a complex network in the detrusor muscular coat. These lymphatics were characterized by an irregular and attenuated wall and increased in number and size from the superficial to the deeper region of the bladder. Ultrastructurally, the lymphatic wall was characterized by endothelial cells joined together end-to-end or by complicated interdigitations. Often intercellular channels and gaps between two contiguous endothelial cells were present. A broad network of elastic and collagen fibers joined the lymphatic endothelial wall to the neighboring connective tissue. Nevertheless, as far as the fibrillar component was concerned, the vesical intramuscular lymphatic endothelial wall lacked elastic fibers. These anatomic variations were examined in reference to lymph formation in an organ (the urinary bladder) which undergoes continual changes in volume and pressure.*