

THE DENSITOMETRY OF B-SCAN IMAGES TO RECOGNITION OF STRUCTURES  
AT THE PROSTATA

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In B-scan images the gray-levels are proportional to the echo-amplitudes.

The distribution of gray levels allows to make conclusions about the distribution of backscattered energies. The gray-level distribution on the negative of a B-scan image arises from structures in tissues. It is a mixed distribution in most cases.

The gray-levels were determined and classified by means of optical densitometry. The components of the mixed distribution and their statistical parameters were evaluated by mathematical methods.

The relation between these components and the corresponding tissues will be discussed. The influence of the incident angle and of the exposition time of the photomaterial on the distribution of the gray levels will be taken into consideration. Examples of in vivo and in vitro investigations will be presented.