# Assessment of the geometric parameters of the optic disc area in the fundus images

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***Abstract***

The paper considers the methods for assessing the geometric parameters of blood vessels at the edge of the optic disk. It is proposed to use the local Radon transform method to estimate thickness parameters. Based on the analysis of the polar developable of the brightness function profile along the contour circumscribing the disk edge, the directions of vessels are searched. Experimental studies have shown that the new method gives a smaller estimation error in evaluating the directions of blood vessels at the edge of the optic disk when compared with the local Radon transform method.

*Keywords:* optic disc area, fundus images, local Radon transform method, brightness function, estimation error.

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