

In this paper, preliminary comparisons of the segmentation results from the retinal nerve fibre layer in digital fundus camera photo with Optical Coherence Tomography results have been done. Early detection of changes in the texture caused by nerve fibres atrophy in DFC images is important for diagnosis of glaucoma. Therefore, the main purpose of this work is focused on the analysis of texture representing RNFL in DFC images. Four local approaches have been successfully tested for automatic detection of RNFL. The features provided by these four approaches were used for texture classification and the results compared with the segmentation results obtained by OCT. An algorithm for semi-automatic measurement of neural layer thickness in OCT images was developed based on gradient edge detection. Promising results have been obtained in this initial study.