Abstract

Different types of techniques are used to detect and segment the retinal diseases. Each technique gives a level of accuracy. Morphological methods have been extensively used in handling medical images. The goal of morphological operations is to remove imperfections by considering the structure of the image. This paper proposes an automated method to detect, (1) lesions in Diabetic retinopathy (2) pigment epithelial detachment in Wet age-related-macular-degeneration (3) soft drusen in Dry age-related-macular-degeneration and (4)
haemorrhages in Central retinal vein and artery occlusion. A three-stage approach is developed to detect and enhance these retinal images. After pre-processing stage involving enhancement, otsu's method is applied to segment lesions, drusens and other affected parts. The third stage is to detect the concentrated and scattered patches using morphological operations.

References

- B. Zhang, X. Wu, J. You, Q. Li, and F. Karray, &quot;Detection of microaneurysms

**Index Terms**

Computer Science  
Image Processing

**Keywords**