Abstract

Diabetic retinopathy (DR) is one of the leading causes of blindness in the world among patients suffering from diabetes. It is an ocular disease and progressive by nature. DR is characterized by pathologies, namely, micro aneurysms, hard exudates, soft exudates, hemorrhages, etc. The presence of exudates is the prominent sign of non-proliferative DR. To successfully detect exudates, it is useful to localize the optic disc in the retinal image under study because it appears in similar bright pattern, color and contrast as exudates appear. In this paper, we review different methods of optic disc localization and compare their results by performing experiments on standard and local database of fundus images.
A comparative Study on Optic Disc Localization with Application to Diabetic Retinopathy in Fundus Images

References

- www.patient.co.uk/health/diabetic-retinopathy.
- Dr. G. G. Rajput and Preethi N Patil, "Detection and classification of exudates
using k-means clustering in color retinal images, to be presented and published.
  - Rafael C. Gonzalez, Richard Eugene Woods, Steven L. Eddins, "Digital image processing using matlab"; Pearson Education India.

  - http://kidbangalore. in/

**Index Terms**

Computer Science  
Image Processing

**Keywords**

Diabetic Retinopathy  
Optic Disc  
Exudates  
Fundus Image  
Color Space  
Segmentation.