



Polyp Detection in Wireless Capsule Endoscopy Images by Using Region-Based Active Contour Model

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Wireless Capsule Endoscopy (WCE) is an almost new technology to capture images from the whole of Gastrointestinal (GI) tract, noninvasively. WCE is a very useful technology to detect various abnormalities like blood based abnormalities, ulcers and polyps. We note that polyps are growing tissues occur on the surface of tissue instead of inside an organ. Most polyps are not cancerous but if one becomes larger than a centimeter, it can turn into cancer by great chance. So, one of the most important advantages of WCE can be the early detection of polyps and cancers. In this paper we proposed using region-based Active Contour Method (ACM) and geometric feature for automatic detection of polyps. The results on a set of images show that the proposed method can achieve %90.91 accuracy, %100 sensitivity and %-83.33 specificity on our data set.

