Abstract

An accurate assessment of iron accumulation is required for diagnosis and therapy of iron overload in various neurodegenerative diseases. Susceptibility Weighted Imaging (SWI) offers information about any tissue that has a different susceptibility than its surrounding structures. Reliable methods to precisely quantify brain iron are essential. Image segmentation refers to partition of an image into different regions that differ in some characteristics. Accurate segmentation of medical images is a very difficult task. However, the process of accurate segmentation of these images is very important for a correct diagnosis by clinical tools. In this paper, an experimental analysis is done using fuzzy c-means and k-means segmentation algorithm for detection of iron content in SWI brain images.
An Experimental Analysis of Fuzzy C-Means and K-Means Segmentation Algorithm for Iron Detection in Brain SWI using Matlab


Index Terms

Computer Science  Fuzzy Systems

Keywords

Susceptibility Weighted Imaging  Fuzzy c-means.