Abstract

Brain abnormality is a major cause of disability and death in human beings. Brain Abnormality is
Brain Abnormality Detection from MR Images using Matrix Symmetry Method

an abnormal growth of cells within the brain. It is the mass of tissue in which some cells grow uncontrollably. For early diagnosis of Abnormality in tissue samples research and development activities are concentrated on the exploration of automatic image analysis. Magnetic Resonance Tomography (MRT) or Magnetic Resonance (MR) imaging is one of the major techniques used by radiologist to diagnose brain internal structure. This technique uses radio frequency pulses of magnetic field to examine different organs. The output of this technique is MR image in DICOM format that can be viewed on computer. This paper reviews some remarkable works from literature along with the basic concepts related to automatic brain abnormality detection techniques. It also includes suggestions for developing a system that can locate brain abnormality in real time. In today’s world many clinical centers or hospitals that maintain large database of MR images, finds the task of indexing the available database according to size or location or other attributes very difficult. To date, automated brain abnormality segmentation from MR images remains a challenging, computationally intensive task. The set of MR slices of a patient is taken as input. In this paper we consider abnormality detection problem as change detection problem, our approach is to identify the most dissimilar region between the left and right halves of brain.

References

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Index Terms

Computer Science
Image Processing

Keywords
Magnetic Resonance Tomography (mrt), Dicom, Magnetic Resonance (mr) Imaging