Pre-processing importance for extracting contours from noisy echocardiographics images.

ABSTRACT

Contours extraction from two dimensional echocardiographic images has been a challenge in digital image processing. This is essentially due to the heavy noise, poor quality of these images and some artifacts like papillary muscles, intra-cavity structures as chordate, and valves that can interfere with the endocardial border tracking.In this paper, we will present a technique to extract the contours of heart boundaries from a sequence of echocardiographic images,where it started with pre-processing to reduce noise and produce better image quality. By pre-processing the images, the unclear edges are avoided, and we can get an accurate detection of both heart boundary and movement of heart valves.

Keyword: Echocardiography images; Noise reduction; Edge detection.