QUANTITATIVEEXAMINATION OF LIVER TISSUE ULTRASOUND ELASTOGRAMS

Małgorzata Przytulska¹, Ireneusz Gierbliński², Juliusz Kulikowski¹, Krzysztof Skoczylas²

¹Nalęcz Institute of Biocybernetics and Biomedical Engineering, Polish Academy of Sciences, Warsaw, Poland

'Department of Gastroenterology, The Cancer Center and Institute of Oncology, Warsaw, Poland

Abstract

Methods of computer-aided statistical analysis of ultrasound elastograms are presented. An approach consisting in initial segmentation of elastograms visualizing low-elasticity segments distribution in the tissue of an examined biological organ and in statistical analysis of this distribution is described. Satisfactory correlation between the values of same statistics and medical specialists' description of human liver elastograms was observed. The ways of continuation of the works aimed at improvement of the elastograms-based diagnostic methods are suggested.

Keywords: image processing, ultrasollnd elastography, image segmentations, liver fibrosis