

Principal Component Analysis for Evaluation Gastric Motility by Scintigraphy

Abstract

Symptoms in Gastrointestinal dysmotility disorders could be resulted from inadequate gastric accomodation. Tecnhiques for assessing gastric motility through standard scintigraphic gastric images has been made only through visual inspection. This study proposes an automatic evaluation of gastric emptying using bi-dimensional Principal Components Analysis. With the applied techniques it was possible to clean the images, to automatically identify the region of interest and to evaluate the velocity of digestion of evaluated individuals.

Keywords: Gastric motility, images, cleaning, region of interest, 2D Principal Component Analysis.