

The update of ultrasound techniques in diagnosis of inflammatory bowel disease

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Abstract

Transabdominal bowel sonography (TABS) with high-frequency ultrasound (US) is a fast, efficient, cheap, well accepted way of examining the intestine, with no radiation hazards. It can detect the increase of bowel wall thickness (BWT) which is considered a specific feature for inflammatory bowel disease (IBD) with or without loss of stratification or loss of haustra. Also the color Doppler technique can detect the blood flow within the bowel wall as possible sign of inflammation, helping in assessment of IBD activity. The aim of our work was to assess the value of high resolution abdominal ultrasound and color Doppler in the diagnosis of IBD and its complications. This study was conducted on forty patients presenting to the Gastrointestinal and Liver Endoscopy Unit, Cairo University, having colonic symptoms; twenty diagnosed endoscopically and histopathologically as IBD and the other twenty-control groups had colonic non-diarrhea symptoms but no endoscopically detected lesions. Our results were; 85% accuracy for high-resolution ultrasound in diagnosis of IBD based on increased BWT, (but it could not differentiate between different types of inflammatory bowel conditions which also presented by increase in the BWT) and 75% accuracy for color Doppler which is important in detecting the hypervascularity as a sign of inflammation. We concluded that US is helpful in localization, follow up and monitoring of treatment of IBD and the pulsed Doppler can be used for follow up of the changes in the pulsed Doppler as those patients undergo multiple period of remission and relapse.

Biography

Maryse Y. Awadallah, lecturer of radiodiagnosis, faculty of medicine Cairo University, completed her M.D. and became a lecturer in 2010.