The combined role of intravenous contrast enhanced ultrasound (CEUS) and computed tomography (CT) in liver abscess diagnosis

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Abstract

Background and aims: Through this study, we intend to review the main aspects regarding the contrast enhanced ultrasound evaluation of liver abscesses, pursuing a comparative analysis between the medical literature and our own experience.

Material and Methods: From June 2008 until December 2010 we have evaluated in our department a consecutive series of 11 patients with liver abscesses (7 males, 63.63%) all between the ages of 45 and 74. All the patients displayed a clinical and biological picture leading to an inflammatory process. The imaging diagnosis was made after confronting the results of the contrast enhanced ultrasound with those of the computed tomography.

Results: In 10 out of 11 patients that were part of the study, we have assessed 14 liver abscesses. A single patient showed spread lesions inside both liver lobes, and they were assessed as hepatic micro abscesses. Three of the patients showed multiple right lobe lesions, 7 patients showed single lesions and one patient showed disseminated lesions within both lobes. We examined six mature lesions, 4 lesions with incomplete necrosis and 4 immature lesions, with no necrosis. The particular aspect of mycotic microabscesses is mentioned at the conventional ultrasound and at the CEUS as well.

Conclusion: Various types of hepatic abscesses have different imaging findings, and typical CT and CEUS findings can suggest the diagnosis.

Key words: liver abscesses, ultrasound, computer-tomography, contrast-enhanced

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