



# Intraoperative Contrast-Enhanced Ultrasound in Colorectal Liver Metastasis Surgery Improves the Identification and Characterization of Nodules

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Résumé en anglais	<p><b>INTRODUCTION:</b> The sensitivity of preoperative assessment of colorectal liver metastases (CRLM) ranges from 74 to 80%. Intraoperative ultrasound (IOUS) associated with contrast-enhanced intraoperative ultrasound (CE-IOUS) may be able to improve this. Thus, the aims of this study were to assess the value of IOUS and CE-IOUS for the surgical approach and to determine risk factors both for the detection of new nodules and for the modification of the surgical strategy.</p> <p><b>MATERIALS AND METHODS:</b> Forty-three patients who underwent CRLM surgery were included. These patients had an MRI in the 8 weeks preceding surgery and benefited from intraoperative IOUS and CE-IOUS.</p> <p><b>RESULTS AND DISCUSSION:</b> The use of IOUS/CE-IOUS permitted the identification of 43 additional lesions and an improved characterization of nodules in 23 patients with a resulting modification of surgical strategy. Lesions were down-staged in six patients and up-staged in six patients. Chemotherapy (<math>p = 0.02</math>) and the presence of nodules in the left lobe (<math>p = 0.04</math>) were predictive factors for finding new nodules at IOUS/CE-IOUS. The discovery of a new nodule systematically modified surgical management. IOUS/CE-IOUS improved intraoperative management of liver metastases. The techniques enable pertinent modification of surgical resections and a reduction of residual lesions.</p>

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## Liens

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