#### LETTER TO THE EDITOR



# Contrast-enhanced ultrasound: the ideal contrast imaging study for pregnant patients

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#### Dear Editor

In volume 48, Issue 5 of Abdominal Radiology, there are several review papers that discuss the complex problems related to diagnostic imaging of pregnant patients. Obviously, the use of CT and MRI contrast agents creates a significant problem in their workup and the radiation associated with CT scan makes it virtually forbidden in this population.

Within this special issue, there is a noticeable absence of CEUS as a safe method for imaging the pregnant patient [1]. Ultrasound contrast agents are true intravascular agents and do not cross the placenta. They are safe to use during pregnancy in all trimesters. They have been used effectively to evaluate pregnant patients requiring a contrast-enhanced examination and have a high accuracy of answering the patient's imaging problems. CEUS may effectively diagnose and stage neoplasia and also address GI and GU complications of pregnancy, such as acute presentation of IBD and torsion or infarction of fibroids. And for those at risk for HCC, their surveillance and nodule workup may continue during pregnancy with the addition of CEUS.

The use of CEUS in pregnant patients requiring a contrast-imaging study will greatly improve patient care in these patients.

### **Declarations**

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## References

 Geyer T., Rubenthaler J., Froelich MF., Sabel L., Marschner C., Schwarze V., Clevert DA. "Contrast-Enahced Ultrasound for Assessing Abdominal Conditions in Pregnancy" Medicina (Kaunas) 2020;56(12):675

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