New Physician Guidelines Recommend Contrast Enhanced Ultrasound to Diagnose Certain Liver Cancers

October 03, 2023 09:51 AM Eastern Daylight Time

CHICAGO--(<u>BUSINESS WIRE</u>)--New physician guidelines now recommend use of contrast-enhanced ultrasound (CEUS) to diagnose hepatocellular carcinoma (HCC), the most common primary liver cancer.

CEUS is a relatively simple, low-cost, non-invasive diagnostic imaging modality that is safely and routinely used worldwide to enhance conventional diagnostic ultrasound imaging, according to the International Contrast Ultrasound Society (ICUS), a nonprofit medical society that offers free CME-accredited webinars on CEUS and other services for the global CEUS community.

"Recent studies demonstrate sufficiently high test performance for CEUS as a diagnostic modality," according to the new Practice Guidance on Prevention, Diagnosis, and Treatment of Hepatocellular Carcinoma published by the American Society for the Study of Liver Disease (AASLD).

The new guidelines recommend CEUS for diagnosing HCC when MR and CT are inconclusive, unavailable or contraindicated.

Liver cancer is the third leading cause of cancer-related deaths, and HCC disproportionately affects American Indian, Hispanic and Black patients when compared to non-Hispanic White persons, according to AASLD.

"We are concerned that without access to CEUS, minority patients with limited access to alternative imaging may be at even greater risk for misdiagnosis or missed diagnosis," said Dr. Yuko Kono, a professor of radiology and medicine at the University of California San Diego. Dr. Kono is a past chair of the American College of Radiology Liver Imaging & Reporting Data Systems (LI-RADS) CEUS Working Group and is a member of the board of directors of ICUS.

CEUS uses FDA-approved "microbubble" ultrasound contrast agents (UCAs) that are administered intravenously during an ultrasound scan. UCAs do not contain dye, create no known risk of kidney damage or deposit of contrast media in the brain, and do not expose patients or hospital staff to ionizing radiation.

CEUS may be used to identify and characterize tumors, monitor chronic gastro-intestinal diseases, diagnose heart and vascular disease, evaluate other serious medical conditions and monitor therapy.

"CEUS scans are very reliable for HCC diagnosis, with accuracy equivalent to MR and CT," according to Dr. Andrej Lyshchik, a professor of radiology at Thomas Jefferson University in Philadelphia. Dr. Lyshchik currently chairs the ACR LI-RADS CEUS Working Group and is a member of both the LI-RADS Steering Committee and the board of directors of ICUS.

He said that CEUS also is safer and less expensive than alternative forms of diagnostic imaging, and it provides diagnostic information in real time.

"In some cases, CEUS can avoid delays associated with MR or CT, and that can help speed up the patient's access to appropriate therapy," Dr. Lyshchik added.

AASLD guidelines are widely followed by physicians throughout North America, and the new CEUS recommendations "represent an important and appropriate step forward in integrating CEUS into modern imaging labs," said Kono.

CEUS is also recommended by guidelines promulgated by professional societies around the world, according to Dr. Fabio Piscaglia, a professor of internal medicine at the University of Bologna and a past president of the European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB). Dr. Piscaglia also is first author of the EFSUMB guidelines on non-hepatic clinical applications of CEUS, a co-author of HCC guidelines of the European Association of the Study of Liver, and a board member of ICUS.

"CEUS is a very reliable, safe, low-cost diagnostic modality that improves patient outcomes and experiences, and often saves lives," Dr. Piscaglia said.

UCAs are manufactured and sold in the US and elsewhere by Bracco, Lantheus and GE Healthcare.