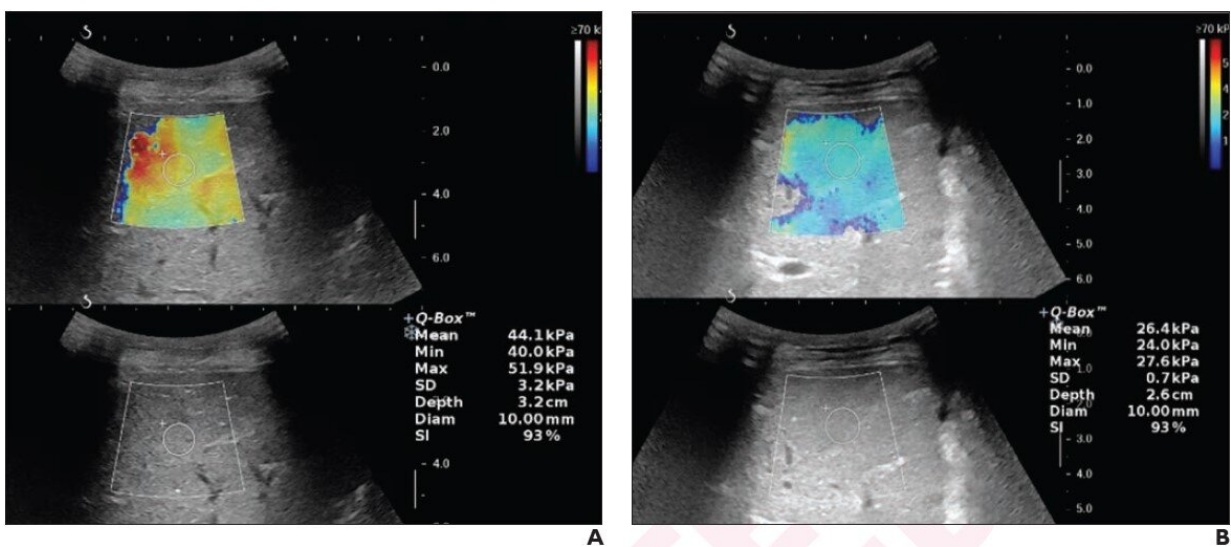


Shear-wave elastography for interventional monitoring of pediatric Budd-Chiari syndrome

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Liver stiffness measurement before (A) and 24 hours after (B) intervention shows a decrease from 44.1 kPa to 26.4 kPa. Credit: American Roentgen Ray Society (ARRS), *American Journal of Roentgenology*

According to ARRS' *American Journal of Roentgenology (AJR)*, liver stiffness measurements (LSM) obtained by 2D shear-wave elastography (SWE) may serve as a useful quantitative adjunct to Color Doppler ultrasound (CDUS) in monitoring children with chronic Budd-Chiari syndrome (BCS) for disease recurrence after percutaneous interventional

treatment.

"LSM decreased significantly after image-guided intervention for chronic BCS in [children](#), showing a maximal decrease at 24 hours post-intervention," wrote corresponding author Sanjay Sharma from the department of radiodiagnosis and [interventional radiology](#) at the All India Institute of Medical Sciences in New Delhi. "Disease recurrence was typically associated with an increase in LSM, compared with the patient's prior measurement."

Sharma and team's prospective study included children with chronic BCS and planned image-guided intervention. CDUS and 2D SWE were performed at baseline; at 24 hours, one month, and three months after intervention; and thereafter every three months or at the time of clinically suspected recurrence.

In the 32 children (28 boys, 4 girls; mean age, 9.0 years) who underwent image-guided intervention for chronic BCS, median LSM was 43.7 kPa at baseline and 22.5 kPa, 18.7 kPa, and 16.7 kPa at 24 hours, one month, and three months, respectively, after [intervention](#). In eight of nine patients with recurrence, LSM was increased, compared with the pre-recurrence measurement.

"The stage of histologic liver fibrosis was not significantly correlated with LSM at any time point, possibly due to the confounding effect of liver congestion," added the authors of this *AJR* article.

More information: Neha Dohare et al, Utility of Hepatic 2D Shear-Wave Elastography in Monitoring Response to Image-Guided Intervention in Children With Chronic Budd-Chiari Syndrome: A Prospective Study, *American Journal of Roentgenology* (2021). [DOI: 10.2214/AJR.21.26547](https://doi.org/10.2214/AJR.21.26547)

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