LOGIQ S8 XDclear 2.0 Enhanced B-Flow Imaging

Visualize hemodynamics for diagnostic confidence

Clinical Challenge

Visualizing blood flow especially in small vessels can be challenging with Color and Power Doppler ultrasound for several reasons. Aliasing and signal dropout can introduce ambiguity into the exam and visualization may be dependent on the user or Color and Power Doppler angle.

GE Solution

Newly enhanced B-Flow™ imaging from GE Healthcare provides additional sensitivity to small vessels and slow flow states to assist clinicians in distinguishing complicated flow patterns. This innovative technique also enables side-by-side or overlaid display of B-Mode and B-Flow images to facilitate imaging of such applications as carotid stenosis and fetal brain studies.

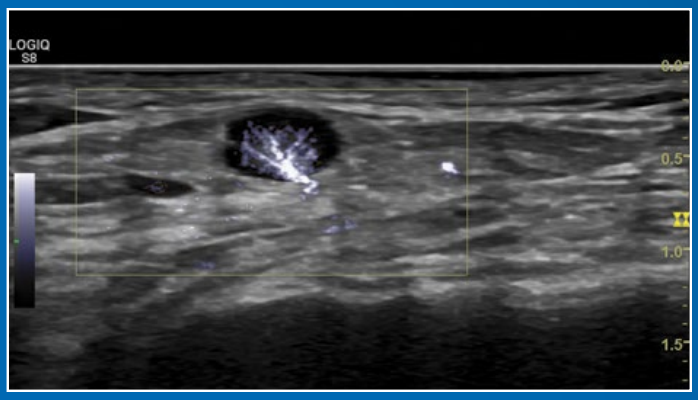
Superb Imaging

Enhanced B-Flow imaging is a further advancement of GE's patented Digitally Encoded Ultrasound technique that boosts weak blood signals and suppresses strong tissue signals. Advantages of direct hemodynamic visualization include:

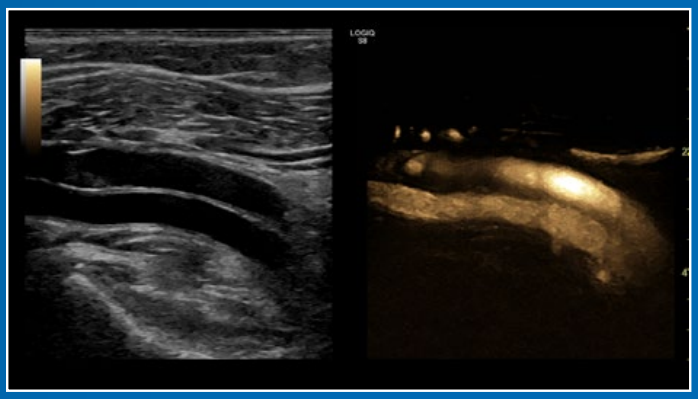
- Detection of the true vessel diameter, improving visualization of the vessel wall without color overwrite
- No Doppler angle dependency enhances the ease of vessel detection
- Higher frame rate and increased spatial resolution as compared to Color Flow
- Visualization across the entire field of view to provide more information

Enhanced B-Flow Color can be displayed within a region of interest (ROI), allowing both B-Mode and B-Flow Color to be visualized simultaneously. This helps to enhance the display of hemodynamics and reduce tissue motion artifacts.

Liver with B-Flow, C1-6-D



Axillary Lymph Node, ML6-15-D



Lower Extremity Vein Image using 9L-D and B-Flow Dual Visualization

Renal Vasculature Using B Flow HD Color, C1-6-D

Simplified Workflow

Enhanced B-Flow and B-Flow Color are very easy to use, enhancing productivity and efficiency:

- Dual or single display
- Selectable settings for tissue background information
- PW Doppler including measurements
- Motion Correction adjusts for patient motion to improve vessel border detection
- Capture mode enhances the visualization of vessel structures
- Capture recon enhances sensitivity and reduces flash artifact in B-Flow and B-Flow Color
- Easy 3D B-Flow Imaging
- May be used with Volume Navigation
- Contrast examinations may be performed with B-Flow to enhance spatial resolution of image organ and tumor vascularity

Clinical Applications

With B-Flow imaging on the LOGIQ S8 XDclear 2.0 system, clinicians have a tool to enhance visualization of:

- Vascular stenosis
- Carotid plaque for vulnerability study (e.g. ulceration)
- Interaction of blood flow with anatomical structures inside the vessel such as venous valve cusps and thrombi
- Grafts for monitoring (e.g. dialysis graft pseudoaneurysms)
- Kidney perfusion (e.g. after transplants)
- Vascular disease after transfemoral catheterization (e.g. AV fistula, dissections, hematomas)
- Liver and spleen vasculature
- Neonatal head vessels
- Fetal Cardiac Septal Defects (e.g. PFO, VSD, ASD)

Imagination at work

www.gehealthcare.com. Product may not be available in all countries and regions. Contact a GE Healthcare Representative for more information.

Data subject to change.

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