GE Healthcare

LOGIQ S7 with XDclear Strain Elastography

Characterize lesions with efficiency and confidence

Clinical Challenge

Examining textural differences in tissue by hand palpation can be limited by difficulty in accessing the region of interest and distortion from intervening tissue.

GE Solution

Strain Elastography can help physicians differentiate benign from malignant lesions. A non-invasive, diagnostic technique performed in correlation with conventional B-mode ultrasound, Strain Elastography measures the elasticity of tissues. This information has the potential to:

- Assist in patient management decisions
- Enhance diagnostic confidence
- Reduce the need for invasive procedures
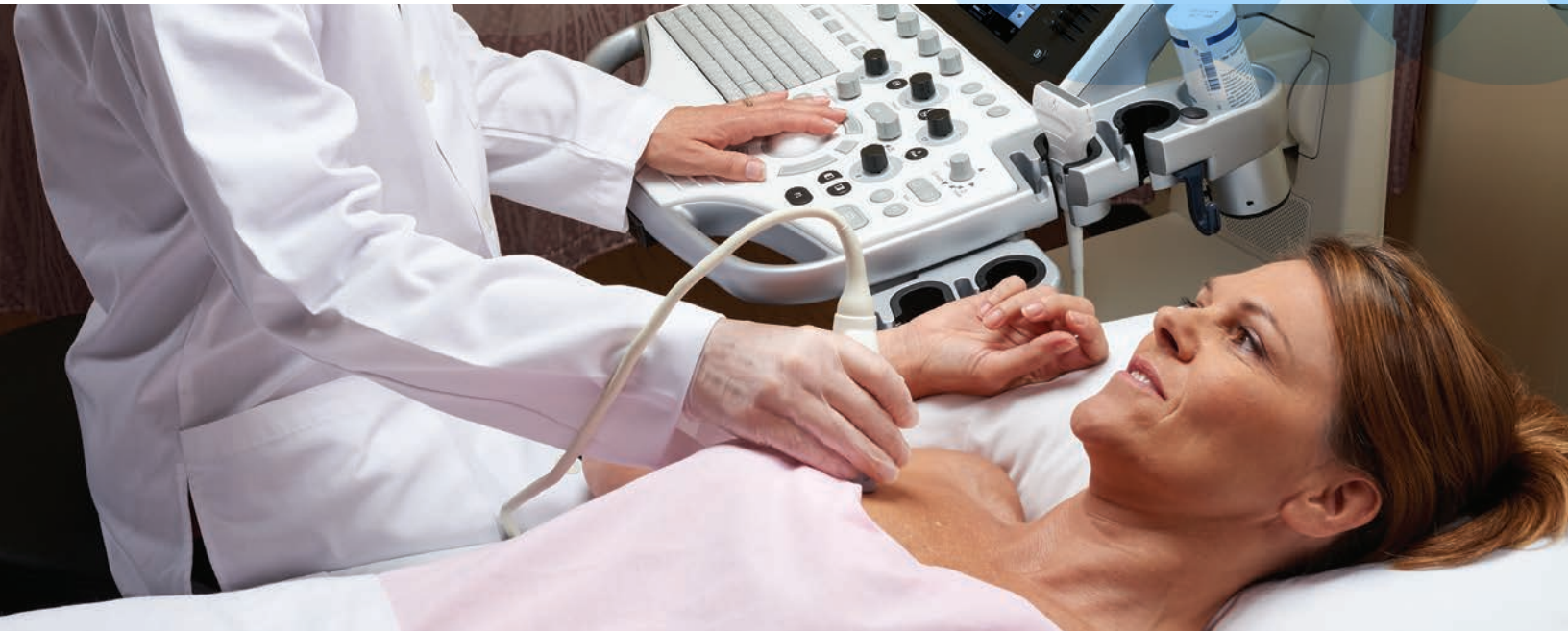
Sensational Performance

Strain Elastography software from GE Healthcare estimates the strain, or tissue deformation, in the region of interest after compression. This calculation creates an elastogram, which is a color overlay on top of the B-mode image representing tissue elasticity. Since malignant tissue is typically of harder consistency than benign tissue, the elastogram can aid in lesion characterization.
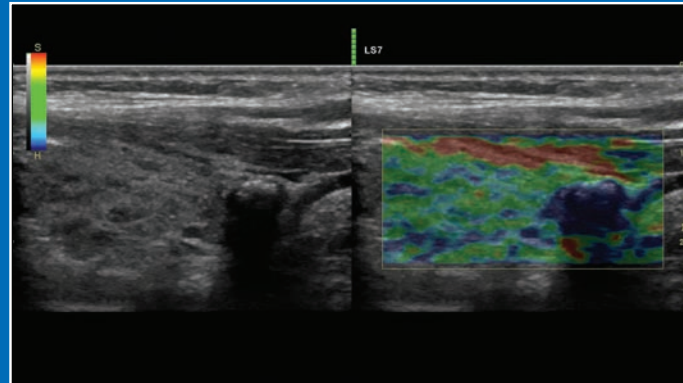
A quality indicator provides visual feedback to monitor the compression technique. This assists the user in learning the technique and achieving reproducible information.
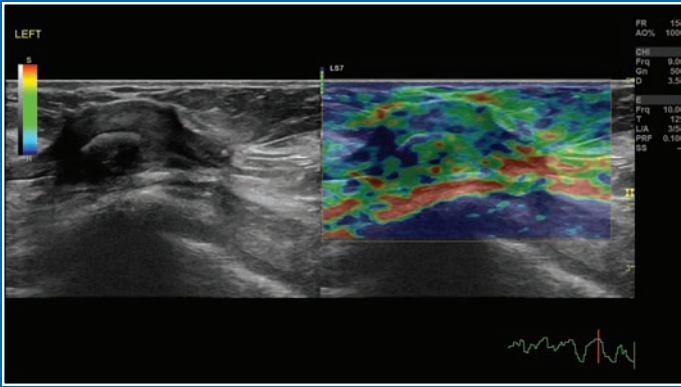
Breast Mass, ML6-15
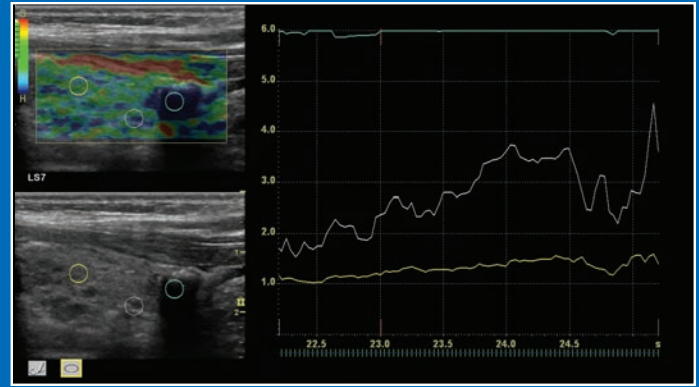
Thyroid Elastography with Q-analysis, 11L-D

Thyroid Elastography, ML6-15

Smart Design

The LOGIQ™ S7 with XDclear™ system enhances workflow in Strain Elastography studies with:

- **High-Res widescreen display** – Configurable 23-inch monitor allows users to display anatomical images and elastograms at the same time, and enlarge images to see the area of interest more clearly.
- **10.1-inch touch panel** – With the large soft-key controls and intuitive layout, users can perform studies with speed and ease.

Specialized Capabilities

Advanced tools can be used in combination with Strain Elastography to help detect and characterize lesions:

- **Q-analysis[1]** – Uses semi-quantification analysis to determine the Elastography index of a single ROI, and the ratio between multiple ROIs. Using a stored ~ 5 second cine, plot each elasticity index and their ratio on a timeline axis for semi-quantification.
- **Compare Assistant** – View a prior study – ultrasound, mammography, CT or MR – and current images together in real time via a split screen on the monitor.
- **Quality Graph and Quality Bar** – Provide visual indicators of a high quality elastogram.

Clinical Applications

Strain Elastography from GE Healthcare offers the means for non–invasive, quantitative assessment of tissue stiffness in a growing range of applications, including:

- Liver, for focal lesions assessment
- Breast
- Small Parts (e.g. thyroid)
- Urology
- Musculoskeletal
- OB/GYN

[1] Not available for sale in the United States. Not cleared by the United States FDA.

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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