The EFAST Exam

John Lemos MD/MPH
Staff Physician, Emergency Department
Co-Director of Emergency Ultrasound
Kaiser Permanente South Sacramento
Critical US for Patient Care Conference 2016

CONFLICT of INTEREST

• NOTHING TO DISCLOSE

OBJECTIVES

Introduction
Anatomy of the EFAST
Acquiring/Interpreting Images

OBJECTIVES

Introduction
Anatomy of the EFAST
Obtaining/Interpreting Images
What is the EFAST exam?

Focused Assessment with Sonography in Trauma
(E = Extended FAST)

Advantages of the EFAST

Accessible Modality
Rapid Triage Tool
Reproducible & Repeatable
Early ID Critical Pathology
Vital Aid in Algorithms

Limitations of Ultrasound

Source of free fluid
Type of Fluid
Operator dependent

EFAST Indications

RAPID TRIAGE
BLUNT TRAUMA
HYPOTENSION
PROCEDURAL
OBJECTIVES

Introduction
Anatomy of the EFAST
Obtaining/Interpreting Images

ANATOMY

PROBE & FREQUENCY

Low
High

ORIENTATION

Indicator on the probe to the RIGHT or the HEAD
Scanning Technique

- Slow adjustments
- Hold at the base

Manipulating the Probe

- "Sliding"
- "Fanning"
- "Rocking"

OBJECTIVES

Introduction
Anatomy of the EFAST
Obtaining/Interpreting Images
FAST EXAM

FAST: RUQ

RUQ ANATOMY

Probe Placement
Morrison’s Pouch

Inferior Tip of the Liver
FAST: LUQ

Probe Placement

LUQ ANATOMY

LUQ

Spleen
kidney
diaphragm

Normal Kidney
Left
Splenorenal Ligament

Fluid preferentially accumulates above the spleen.
FAST: Pelvis

PELVIC ANATOMY

PROBE ORIENTATION

TRANVERSE  LONGITUDINAL

PROBE PLACEMENT
FREE FLUID

TRANSVERSE

LONGITUDINAL

FREE FLUID

FAST: Cardiac

CARDIAC ANATOMY
PROBE PLACEMENT

SUBXIPHOID VIEW

• Cardiac Motion
• Pericardial Effusion
• Chamber Size and Function
Use the Ribs to Orient you
Probe Perpendicular to the Chest Wall
Anchor your Hand
Use the Ribs to Orient you

EFAST

Normal
No sliding
Normal Lung

Pneumothorax

Comet Tails & B-lines

Comet Tails and B-lines rule out pneumothorax in the rib space you are interrogating

USE OF M-MODE
Questions ?
Comments ?

Thank You