
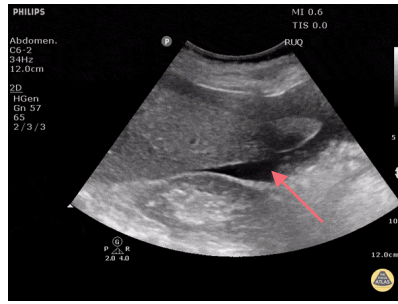
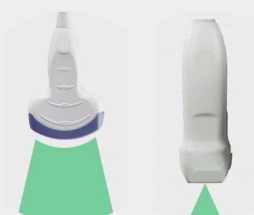
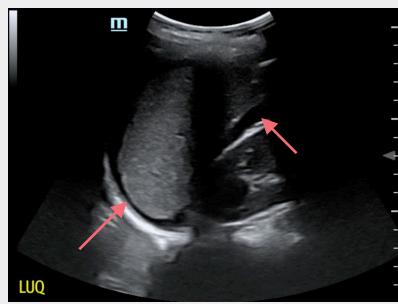
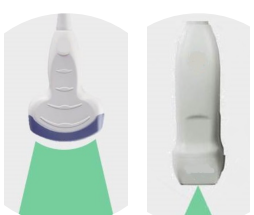
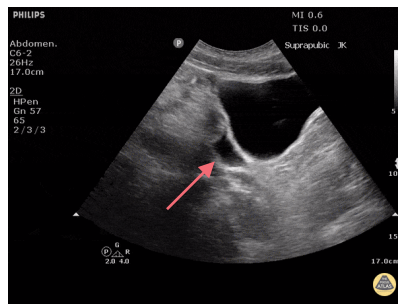
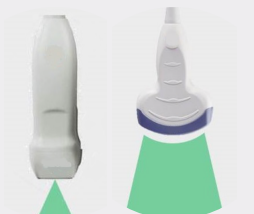
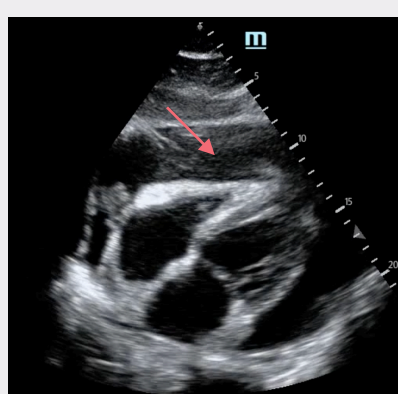

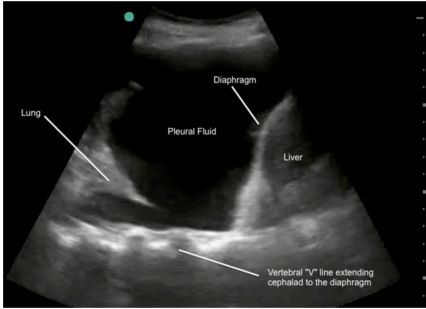

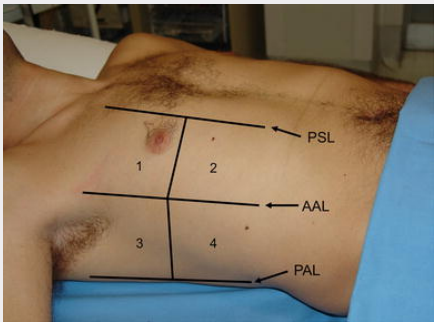
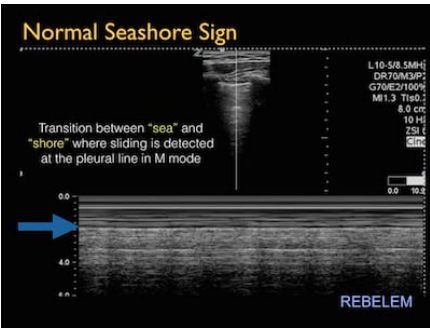
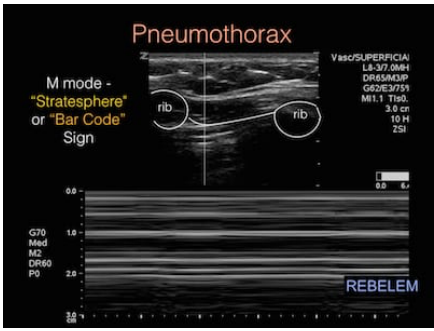


POCUS Club

eFAST

Improve your primary survey with eFAST!

Traditional FAST	Assess	Probe selection & tips	Positive FAST
RUQ	<p>Caudal liver tip most likely free fluid+ (Lobo et al. 2017)</p> <ul style="list-style-type: none"> > Hepatorenal space (Morrison's pouch) > Sub-diaphragmatic space 	 <p>Consider oblique orientation parallel with ribs to avoid rib shadow.</p>	
	<p>Sub-diaphragmatic most likely free fluid+</p> <ul style="list-style-type: none"> > Splenorenal space > Left paracolic gutter 	 <p>Scan more posteriorly than RUQ.</p>	
	<p>Lateral to bladder and retrouterine (PoD) most likely free fluid+</p> <ul style="list-style-type: none"> > Retrovesicular 	 <p>Avoid too much gain as may miss free fluid!</p>	
	<p>Subxiphoid view generally best for pericardial fluid.</p> <p>Alternatively parasternal or A4C views.</p>	 <p>View may be hindered by air in stomach. Place probe to the right of xiphisternum and scan obliquely using liver as acoustic window.</p>	

Extended FAST	Assess	Probe selection & tips	Positive eFAST
Hemithorax views	Slide cranially from RUQ/LUQ views to look above diaphragm - pleural sliding indicates aerated lung, anechoic region with "spine sign" = effusion	 Phased-array sometimes preferable (fits between ribs).	
Lung views	Anterior zones in supine patient most sensitive for PTX (scan 2 zones). Consider scanning lateral zones.	 Use lung preset, minimise depth for best resolution of pleural line	
	Normal - pleural sliding/shimmering, lung pulse, "seashore" sign (M-mode). PTX - absent lung sliding, "barcode" sign (M-mode).	 	

Evidence

FAST
Nishijima et al. 2012
Systematic review - 22 prospective studies (n=12089)

Positive FAST for Detecting Intra-abdominal Injury	
+ Free Fluid	
Sensitivity	74
Specificity	96
Positive LR	30
Negative LR	0.26

PTX
Alrajhi et al. 2012
Systematic review - 8 prospective studies (n=1048)

Pneumothorax	
No Lung Sliding and Lack of Comet Tails	
Sensitivity	90.9
Specificity	98.2
Positive LR	50.5
Negative LR	0.09

Think FAFF (Focused Assessment for Free Fluid) in non-trauma setting for...

- Undifferentiated abdo pain
- Shock
- Ruptured ectopic/ovarian cyst
- Pleural effusion
- Ascites

RESOURCES & REFERENCES
5 Min Sono: <http://5minsono.com/efast/>
The POCUS Atlas: <http://www.thepocusatlas.com/ea-trauma>
UltrasoundGEL podcast: <https://www.ultrasoundgel.org/posts/LwclMSANlyDYtgr2Y1I22g>