

The FASH Exam

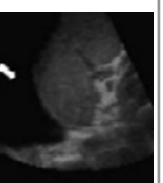
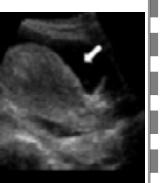
Excerpt from original story in EMpulse Summer 2018 by Michael Traum, MD, PGY-1 and Leila PoSaw, MD, Ultrasound Director at Jackson Memorial Hospital's Emergency Medicine Department.

The following six questions (yes/no) are asked:

1. Is there a pericardial effusion?
2. Is there a pleural effusion?
3. Is there free fluid in the abdomen?
4. Are there periportal/para-aortic lymph nodes?
5. Are there focal liver lesions?
6. Are there focal spleen lesions?

Seven views are obtained with the curvilinear or phased array probe.

1. The **Subxiphoid view** evaluates for the presence of pericardial effusion.
2. The **Para-aortic view** assesses for the presence of enlarged abdominal lymph nodes. These appear as hypoechoic, round structures which may appear to grow or shrink when fanning through the image. Enlarged lymph nodes >1.5 cm are highly suggestive of disseminated abdominal TB.
3. The **RUQ view** assesses for the presence of pleural effusion and for free fluid. Pleural effusions are typically anechoic or hypoechoic; however, effusions from TB may be fibrinous with a heterogeneous sonographic appearance. Similarly, patients with TB may have hypoechoic ascites or may exhibit fibrinous strands.
4. The **Focused Liver view** evaluates for focal, hypoechoic liver lesions.
5. The **LUQ view** assesses for pleural effusions in the left lung. Unilateral pleural effusions are more common in TB. This view also assesses for free fluid in the spleno-renal space.
6. The **Focused Spleen view** evaluates the spleen to look for the focal, hypoechoic lesions which are often due to disseminated TB. These abscesses have a characteristic appearance and should prompt confirmatory studies.
7. The final view of the FASH exam is the **Suprapubic view** to evaluate for ascites. While not specific, this view is crucial for completeness.

FASH: Focused Assessment with Sonography of HIV/TB Curvilinear/ phased array probe. Seven views.	SubX: Is there a pericardial effusion? 	Para-aorta: Are there enlarged lymph nodes? 	RUQ: Is there free fluid? Is there a pleural effusion? 	Focused Liver: Are there focal lesions? 	LUQ: Is there free fluid? Is there a pleural effusion? 	Focused Spleen: Are there focal lesions? 	Suprapubic: Is there free fluid? 
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Suprapubic	Focused Spleen	LUQ	Focused Liver	RUQ	Para-aorta	SubX	FASH: Focused Assessment with Sonography of HIV/TB
							Curvilinear/ phased array probe. Seven views.