

Detroit SonoWAR 2023

#10 Exsanguination Station

During World War II, the US military used Belle Isle Park for amphibious assault training. They also staged a re-enactment of the invasion of a Pacific Island invasion by the Navy and Marine Corps.¹

Your team witnesses a mass casualty event during one of these training scenarios. A tank slips off the ramp from the Tank Landing Craft and crushes several personnel. You are armed with your ultraportable PoCUS device and must rapidly triage who requires the most urgent surgical intervention.



By comparing novice and expert EM residents, it has been shown that EM residents' FAST exam skills can be *objectively measured* by differences in their probe motion efficiency, scanning time, and probe path length.²

References and neat articles to consider perusing en route to this station:

1. Rodriguez, Michael; Featherstone, Thomas (2003). *Detroit's Belle Isle Island Park Gem*. Arcadia Publishing. p. 85.
2. Bell, C et al. *Sonographic Accuracy as a Novel Tool for Point-of-care Ultrasound Competency Assessment*. SAEM AEM Education and Training, 2017.
3. Lobo, V et al. *Caudal Edge of the Liver in the RUQ View is the Most Sensitive Area for Free Fluid on the FAST exam*. Western Journal of Emergency Medicine, 2017.
4. Prats, M. The Most Sensitive View of the FAST. *Ultrasound G.E.L.* 2017
<https://www.ultrasoundgel.org/posts/LwcLMSANlyDYtgr2Y1I22g>
5. *FAST Exam*, WikEM. Accessed 2021. https://wikem.org/wiki/FAST_exam
6. *Thoracic Trauma*, STATPearls. Accessed 2021.
<https://www.statpearls.com/ArticleLibrary/viewarticle/30078>

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- 1 Point Discover this station
- 1 Point What part of the abdomen – specifically – is the most sensitive area for free fluid on the FAST exam?
- 1 Point What is the lowest amount of free fluid in the abdomen that can be reliably seen on FAST exam?
- 1 Point List three types of patients that may have a false-positive FAST exam
- 1 Point Where does the FAST exam conceptually fit into the initial evaluation of a trauma patient per ATLS for oral boards? (i.e., primary survey, secondary survey, etc)

First-touch accuracy: Choose your teammate to perform a FAST exam on. You do not get to slide your probe once it touches the skin. (Rocking, tilting, and fanning are allowed).

- 1 Point Identify all three RUQ areas of significance *without sliding your probe* on the skin
- 1 Point Identify all three LUQ areas of significance *without sliding your probe* on the skin
- 1 Point Identify three areas of fluid collection in the pelvis *without sliding probe* on skin
- 1 Point Be able to identify presence or absence of pericardial fluid on first skin contact
- 1 Point On a different teammate, perform an entire FAST exam (with satisfactory imaging of ALL views above) in less than 45 seconds.

Bonus Point: Tweet a photo with your team name for this station (and an action shot) with #SonoWAR to have a bonus point added on the back end!