

## AACES Abdominal Ultrasound Course

A focused and systematic sonographic evaluation of the abdominal organs and peritoneum

**30 May 2019**



### Course Description

Specifically designed for healthcare providers who are exploring point of care ultrasound to enhance the evaluation and management of the patients with abdominal symptoms. Covering the peritoneum and seven major abdominal organs, the course presents a systematic and focused assessment with ultrasound. Lectures are succinct and delivered in an interactive format. The **Hands-on Training** is the cornerstone of the program. During these sessions, participants will be guided to perform bedside scans on volunteers with normal and pathological findings. With 5 hours set aside for live demonstration and scanning, and keeping the trainer to trainee ratio at maximum of **1:4**, participants will have ample opportunities to practise during the Hands-on Training sessions. This course will introduce the fundamental concepts in evaluating the abdomen using point of care ultrasound for healthcare provider.

### Learning Objective

Upon completion of this course, participants will learn how to:

- Appreciate and identify basic normal sonographic anatomy of the liver, biliary system, kidney, spleen, pancreas, bowel and abdominal aorta.
- Perform focused assessment of these 7 major organ systems using the **S.A.F.E.R LASSO** approach
- Evaluate the peritoneal space for free fluid and free air
- Assess the liver for size, echotexture, focal mass, and features of portal hypertension
- Assess the gallbladder for size, wall thickness, stones and focal mass
- Assess the intra and extrahepatic biliary ducts for size and stones, and intrahepatic biliary ducts for aerobilia
- Assess the kidney for size, echotexture, stones, focal mass and pelvi-calyceal dilatation
- Assess the spleen for size, echotexture and focal mass
- Assess the pancreas for size, echotexture and focal mass
- Assess the bowel for size, wall thickness, distension and compressibility
- Assess the abdominal aorta for size, leak and dissection
- Integrate key sonographic findings in the assessment of patients with abdominal symptoms

### Who should attend

Surgeons, physicians, emergency physicians, nurse practitioners, residents, medical officers and healthcare workers involved in the management of patients with abdominal complaints and emergencies. Participants should already have a basic understanding of point of care ultrasound and ultrasound physics.

### ACGME-I Competencies

This course is designed to meet one or more of the following ACGME competencies:

- Patient Care
- Medical Knowledge
- Practice-Based Learning and Improvement

## AACES Abdominal Sonography Khoo Teck Puat Hospital, Singapore • 30 May 2019 Program

AM		PM	
	<p><b>Online Lectures</b></p> <p>~</p> <p><b>Physics, Knobs and Probes</b> <i>Dr Toh Hong Chuen</i></p> <p><b>Abdominal Aorta Assessment</b> <i>Dr Francis Lee Chun Yue</i></p>		
8:00	<b>Registration &amp; Welcome</b>	2:00	<b>Peritoneum Assessment</b> 10min Evaluation of the peritoneum for free fluid and free air. Peritoneal scanning techniques and protocol.
8:10	<b>The S.A.F.E.R evaluation</b> 10min A focused point of care ultrasound evaluation of the abdominal organs and peritoneum.	2:10	<b>The LASSO approach</b> 10min A systematic evaluation of patients with abdominal symptoms.
8:20	<b>Liver Assessment</b> 20min Essential liver anatomy and sonographic windows, scanning techniques and protocol. Focused assessment of the liver.		<b>Case Discussion</b>
8:40	<b>Spleen &amp; Pancreas Assessment</b> 25min Essential splenic & pancreatic anatomy and standard windows, scanning techniques and protocol. Focused assessment of the spleen & pancreas.	2:20	<b>Renal &amp; Bowel</b> 15min Renal cystic diseases, masses, infection, renal calculi, vascular diseases (renal artery stenosis, renal vein thrombosis). Renal trauma. Acute appendicitis. Intestinal obstruction.
9:05	<b>Hands-On Training 1</b> Liver, Spleen & Pancreas scan	2:35	<b>Spleen &amp; pancreas</b> 15min Splenomegaly, masses, infection, trauma, infarction. Pancreatitis, pancreatic masses
10:45	<b>BREAK</b>	2:50	<b>Liver</b> 15min Diffuse parenchymal disease (cirrhosis, fatty infiltration, hepatitis). Discrete parenchymal disease (tumours, abscess). Vascular disease (Portal hypertension and porto-systemic shunts, passive hepatic congestion). Hepatic trauma
11:00	<b>Biliary Assessment</b> 15min Essential biliary anatomy and sonographic windows, scanning techniques and protocol. Focused assessment of the gall bladder and biliary tree.	3:05	<b>Biliary</b> 15min Acute cholecystitis, cholelithiasis, gallbladder masses. Choledocholithiasis, biliary obstruction, pneumobilia, Mirizzi's syndrome.
11:15	<b>Renal &amp; Bowel Assessment</b> 25min Essential renal & bowel anatomy and sonographic windows, scanning techniques and protocol. Focused assessment of the kidney and bowel.	3:20	<b>BREAK</b>
11:35	<b>Hands-On Training 2</b> Biliary, Renal and Bowel scan	3:40	<b>Hands-On Training 3</b>
1:15	<b>LUNCH</b>	5:20	<b>Course Closure &amp; Feedback</b>
			<p><b>Venue:</b> Khoo Teck Puat Hospital. 90 Yishun Central Singapore 768828</p>