SutherSound

The Sutherland ED PoCUS Newsletter

http://www.sutherlanded.com/pocus/

October/November 2018

TSH PoCUS Faculty

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Quality Improvement JMO

	Staff Specialist-held CCPU Modules
KS	EFAST, AAA, Biliary, BELS, Lung, DVT, Basic Early Pregnancy
DG	EFAST, AAA, Biliary, Renal, DVT, Vascular Access
TB	EFAST, AAA
KY	EFAST, AAA
MB	EFAST
KO	EFAST
SF	EFAST

Attention SSU Consultant & JMO

Poor adherence to the Daily US Machine Cleaning Roster was discussed at our recent faculty meeting. There was a consensus to change the responsibility from the Fast-Track doctors to that of the SSU team. The intern/RMO allocated to SSU each morning should locate the machine, perform a daily morning clean and ensure it is appropriately restocked. This role includes signing the logbook which is attached to the machine, recording any concerns and escalating these to the SSU Consultant/US faculty. It is everyone's responsibility to keep the machine in good condition so that we can ensure its longevity in the department. This includes an awareness of the appropriate method of storing and cleaning the probes as well as the use of Sonosite/infection control agreed cleaning materials.

The machine cleaning guidelines can be found at: http://www.sutherlanded.com/wp-content/uploads/2018/02/TSH-US-Machine-Hygiene-Business-Rule.pdf

Dr Daniel Gaetani will be conducting an US teaching session on November 7th between 2.30pm and 3.30pm which will include revision of machine hygiene. Introduction to this new process will also be covered at intern/RMO ED induction.

Scan Review: Insights from our SEED

Our resident SEED, Janine Lister, often reviews images saved by you on the machine. The most common yet avoidable finding is the lack of labelling, particularly on EFAST scans. This has important medicolegal implications, highlighted by a recent RCA case where the department was asked to provide a PoCUS image (unlabelled) of a *possible* AAA to a Vascular Surgeon.

To label an image once you have ended the exam there are a few steps:

- Select *Patient Review*
- Chose the patient - either double tap the name or press over the associated tick box and then select *Image Review.*
- Tick the box of the unlabelled thumbnail image you wish to label
- Select *Full Screen* and then *Label* on the RHS of the touch screen
- Add the desired label and then select *Save Image and Calcs*
- This will add the new labelled image to the end of your review
- Finally, select *End Exam*

KS = Kirsty Short
DG = Daniel Gaetani
TB = Tanya Bautovich
KY = Kris Yuen
MB = Matt Bode
KO = Kevin Ostrowski
SF = Sascha Fulde

Dates for the Diary:

EMUGS NSW – Clinical Leaders Meeting & Education Session
Friday 9th Nov
University of Sydney Sutherland Room, 3.00pm - 9.30pm
Our very own SS Daniel Gaetani will be co-hosting a session, 'Regional anaesthesia Shoot Out'
Tickets available from:
https://www.eventbrite.com.au/e/emugs-nsw-tackling-the-tough-topics-the-pocus-debate-clinical-leaders-meeting-tickets-47911285946

RPA Point of Care US Workshop
18th – 21st February 2019
*** Highly recommended, limited places! ***
To register email:
ccsonography@gmail.com

SEED days:

Nov 15th/16th, 21st/22nd, 28th/29th
Keep your eye on the Onedrive roster for December dates.

Scan review dates with US Faculty:

Admin days for KS:
Nov 14th, Dec 5th and 19th
Admin days for DG:
Nov 14th, 28th, Dec 6th, 13th, 19th, 21st, 27th

This will only work for single images, not videos/cineloops which are the most commonly saved files. If using your study for credentialing purposes only, this can be overcome once you open them on to a computer using software that allows labelling, eg iMovie on a Mac. In all other scenarios, any saved videos are being used to aid decision making and the video will need to be re-taken ensuing that it has been labelled beforehand.

The Ultrasound Corner

We now have a dedicated US corner in Resus 1. The US machine should be stored here and plugged in after every use. Everything you need to clean and re-stock the machine is kept on these shelves as well as equipment for FIBs, nerve blocks and vascular access including both long and short (Freezer Bag) sterile probe covers. A reminder that ALL vascular access should be performed using sterile covers; the freezer bag for peripheral access and long covers for CVCs.

TSH Ultrasound Audit Time

October data will be audited by Dr Jason Ngai and presented at Registrar teaching in December. The areas audited remain the same: documentation, recording of minimum dataset for each patient and machine cleaning. Remember to save any scans you do purely for credentialing purposes as 'TRAINING' scans within the patient data screen so that they are not included in the audit. You can always edit the patient data screen retrospectively to add this detail. Our US Faculty can demonstrate how to do this.

The Great Masquerader Strikes Again!

See video uploaded with this issue.
A 76yo M presented to ED with 2 hours of central chest heaviness which started whilst eating breakfast with his wife. Background of hypertension, hypercholesterolaemia, renal artery stenosis, SAH, CKD and iliac aneurysm. Triage cat 2, initial obs: BP 135/80, HR 65, sats 98% on air. On transfer from ambulance stretcher to bed, stated 'I don't feel right' and became unresponsive, lost output and had 2 minutes of immediate CPR. Post ROSC was bradycardic at 30 with unrecordable blood pressure. Given 600mcg IV atropine with improvement in HR (111) and BP (131/82). Standard eFAST subcostal image showed an obvious pericardial effusion. Bloods showed troponin 11, Hb 133, Cr 131 and lactate 3.5. CXR showed double calcium sign.

Email Kirsty Short with the MRN and a short summary of any interesting cases for future SutherSound issues.

Further reading:
Echo use in dissection is discussed in the US case bank from the RPA Critical Care Sonography site: https://www.criticalcare-sonography.com/2017/03/28/aortic-dissection-stanford-type-a/

Dr Peter Wyllie recently wrote a fantastic summary on Acute Aortic Syndromes in the Weekly Probe: volume 15, issue 20.

TSH Cardiologist, Dr Shiva Roy has reviewed this subcostal image and agreed with the interpretation of a moderate pericardial effusion with no obvious collapse of the RV but that it was difficult to rule out tamponade in a single window. He also commented that the aortic root looked suspicious, possibly thickened.

CT angiogram showed a Stanford A dissection with pericardial involvement and features of tamponade. No beta blocker or vasodilator required for HR and BP control. BP trending downwards requiring IVF to maintain SBP 90mmHg and HR 66. Transferred to St George and taken to theatre that day for aortic arch and ascending thoracic aorta repair. Post op complications of pseudomonas infection in sternal wound and ventilator acquired pneumonia. Currently remains in St George Private ICU.

Take home message: PoCUS use guided ongoing investigations and resulted in more rapid transfer to a cardiothoracic centre for definitive care.

Thanks to TSH Staff Specialist, Dr Joanna Short for submitting the case.