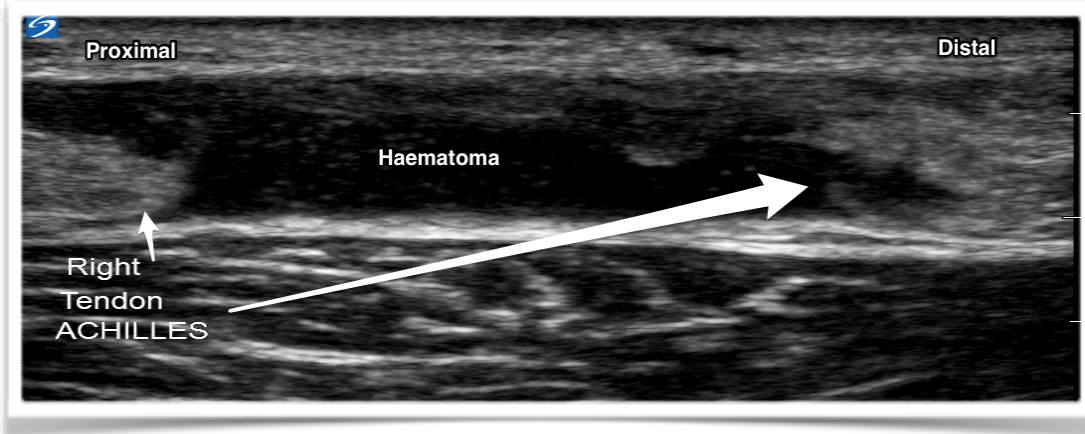


SONIC BOOM

Ultrasound Special Skills Newsletter No 7



Achilles Tendon Rupture

The above image was obtained from the right achilles tendon region of a young man with acute onset of pain during basketball.

He provided a classic history of a feeling of being ‘kicked at the back of his ankle’ during play and then subsequently being unable to walk. On examination, the suspicion is clear however ultrasound is the main modality to quantify the degree of disruption as that is what guides management by Orthopaedics. This was as evident above, a complete tear about 5cm proximal to the insertion site on the calcaneus. Complete ruptures usually require surgery. A true rupture of the Achilles tendon was first described by Ambroise Pare in 1575 and first reported in the medical literature in 1633.



“Loss of privacy starts early”



“In the matter of Mrs. M’s pregnancy, Mr. Peanut, you are the father!!”



“Keep Calm and love Ultrasound”

1

RIGHT PATIENT

Will a scan add value to your patient’s journey?

2

RIGHT STUDY

What is your clinical question?

3

RIGHT PROBE

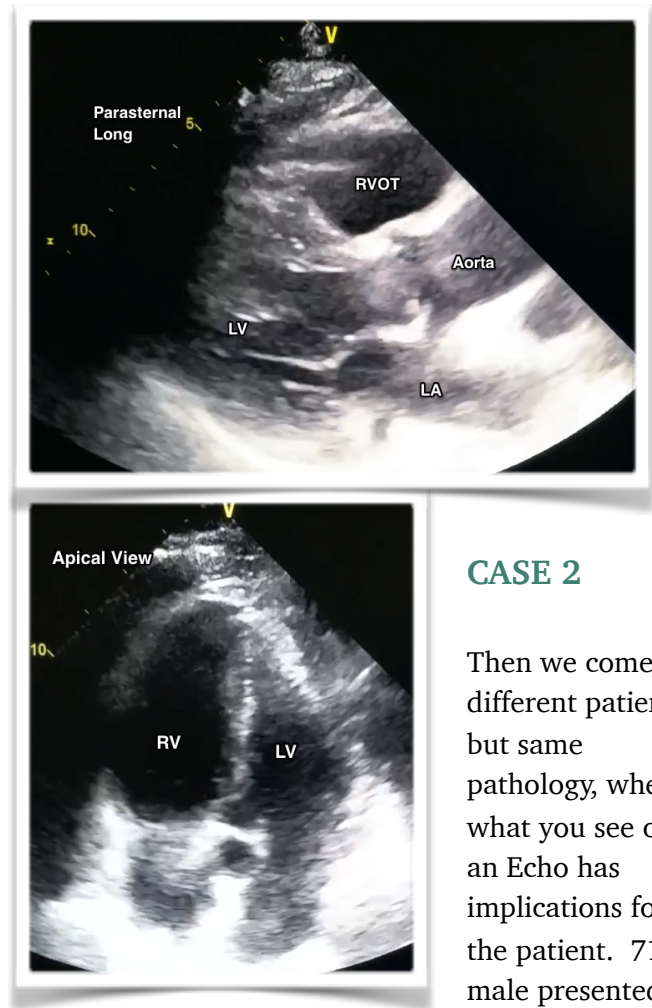
Choose the correct probe

Role of Echocardiography as a cognitive tool

Patient with SOB

76yo male presented to Frankston ED with 24hr hx of SOB, Mild LL oedema, Bibasal chest creeps, Normal ECG and Troponin rise 130. Background Hx included Oesophageal Ca with no recurrence post treatment for 10yrs. At this point, the differential list can be long and theoretically anything is possible but we should all agree that it includes ACS/CCF and PE. Broadly it is encompassed by cardiac or lung pathology. My bedside Echo and Lung US was more important in what it did NOT show than what it did. There was no gross ventricular dysfunction, no valvular pathology and no evidence of pulmonary/interstitial oedema. My advice was to perform a CTPA which showed bilateral PE and a significant clot burden.

“Sometimes what you don’t see is as important as what you do see on an Echo.”



CASE 2

Then we come to a different patient but same pathology, where what you see on an Echo has implications for the patient. 71yo male presented with SOB, minor

hypoxia, TWI on ECG, raised istat Trop 0.27 (Hsn-Trop 114). BG of recent surgery makes PE high on your list of dx to exclude. Bedside Echo here showed moderate RV dilatation with moderate dysfunction and pulmonary hypertension (see images). This was a submassive PE (Thrombolysis remains controversial in this setting and is decided on a case by case basis - Respiratory Unit chose not to thrombolysed this patient).

FRACTIONAL SHORTENING - ANOTHER LV FUNCTION MARKER.....

Last week, we looked at the EPSS as a way of judging LV function. Now we look at Fractional Shortening (FS) - which is % change in LV dimensions between systole and diastole (in M-mode). You place the M-mode cursor in a parasternal long axis view just below the mitral valve leaflets. A shortening of 25-43% correlates to a normal EF of >55%.

