Neurovascular interventional radiology and COVID **v2**

All cases are treated as suspected COVID.
There is extremely poor ventilation in the neurovascular suite, hence all intubations and extubations are done in theatre.

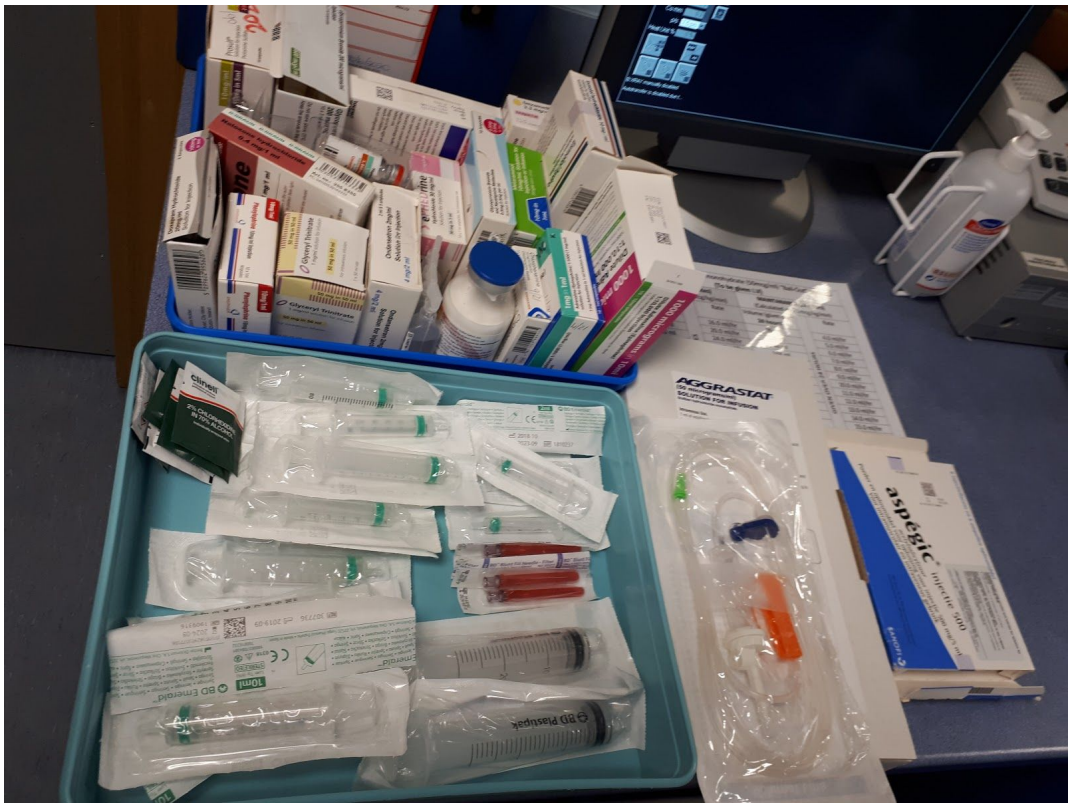
Particular issues:

- Only the minimum number of full PPE donned staff can stay in the intervention room. The area outside the window is considered clean.
- The anaesthetic team (doctor and ODP) remains in intervention area throughout
- Lead radioprotective aprons must be worn under PPE.

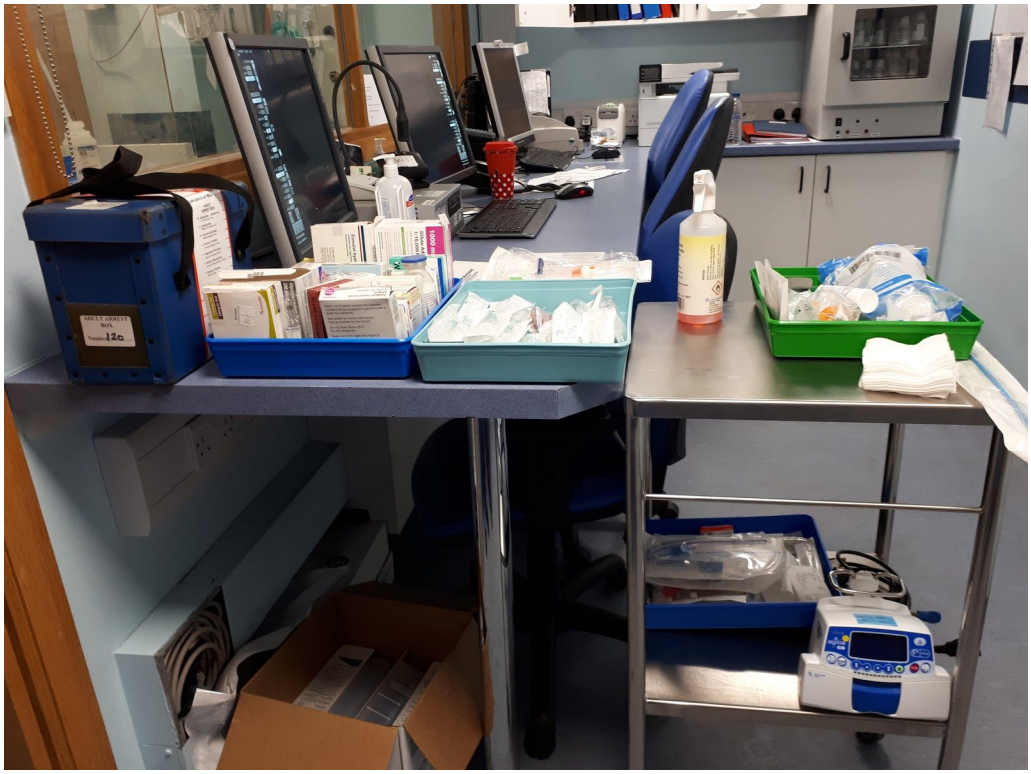
Today's approach

1. I ensured that the radiology areas were set up prior to assessing patient

Machine fully set up, radioprotective screen ready near the window.
Also useful to have 2 stools and a small trolley to write on.
Keep in mind that the radiologist will don off and on again after the 3D scan, as they need to go into the clean area to check the images. Everything takes longer than usual!



All emergency drugs including tirofiban and aspirin were kept in the clean computer area .Also the blue box, pumps and emergency intubation kit.
Identify a clean runner familiar with handling these drugs and equipment.

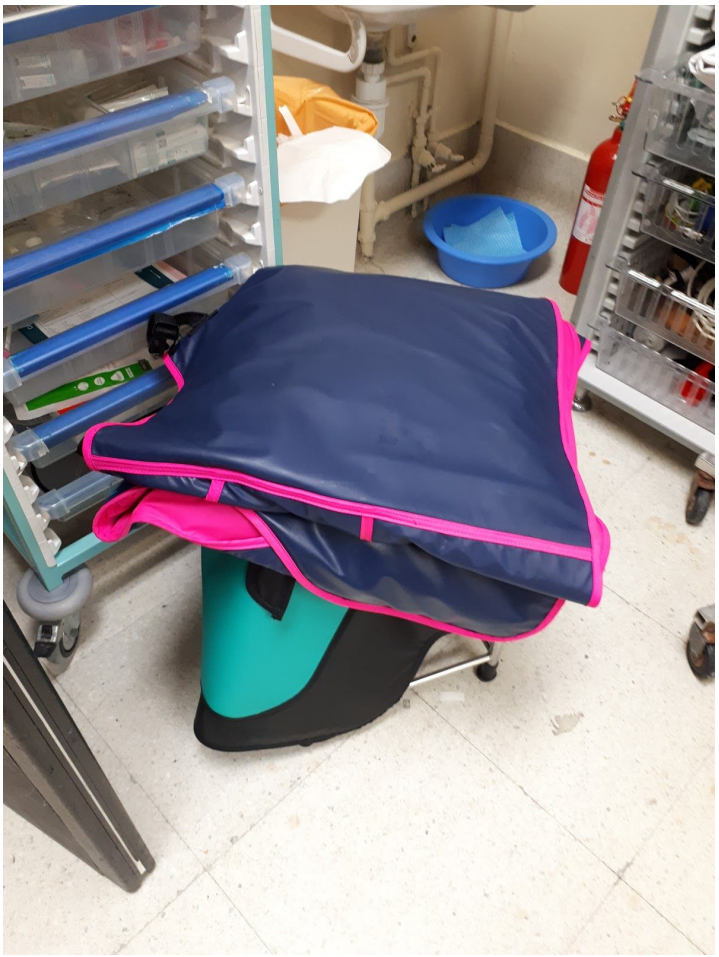


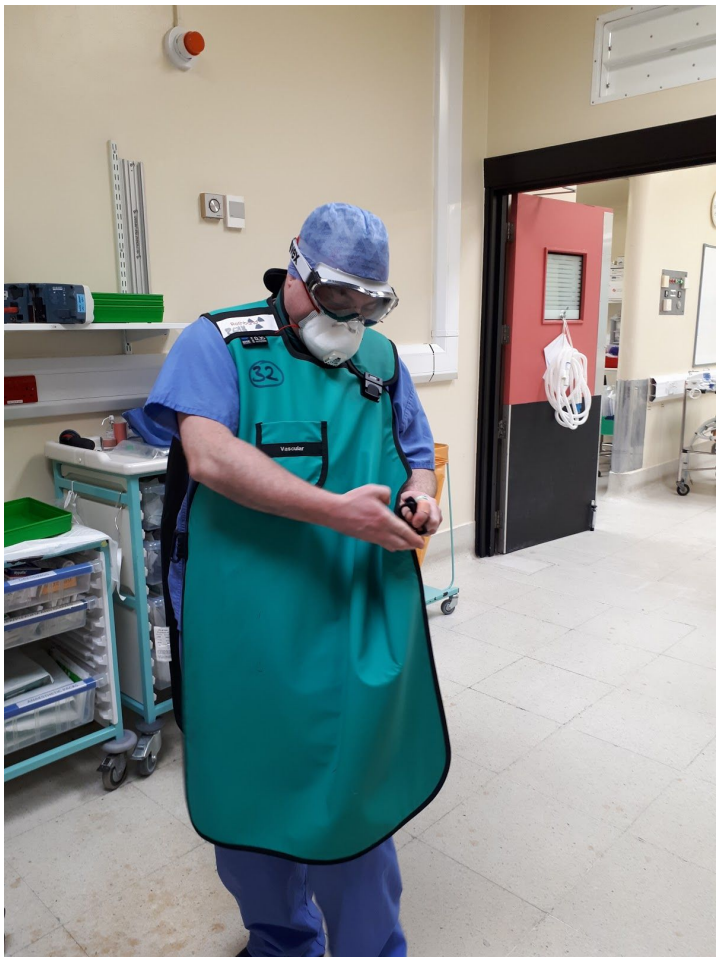
2. Assess patients as usual. Please note that they continue to forget to do ECGs despite intracranial haemorrhage.

3. Set up induction and emergency drugs in theatre, including propofol IVI for transfer and phenylephrine infusion.
   We need to use a transfer monitor and an oxylog, so might have to dip into MERIT kit.

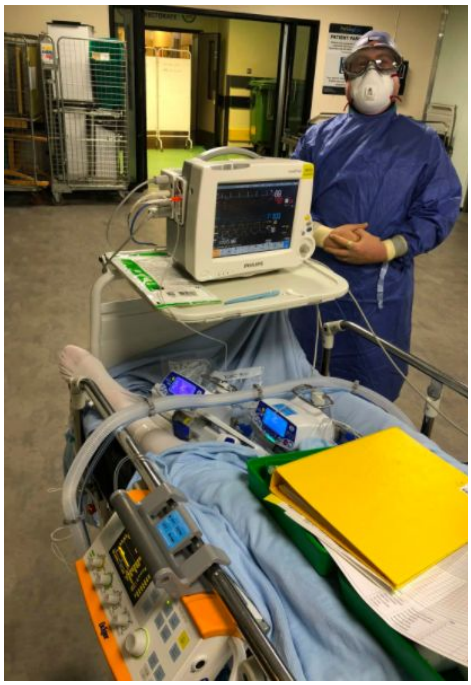
4. Ensure that somebody comes from radiology to act as a clean runner and hold the elevator for you. They have a key.

5. Put your lead on before donning (we brought ours to theatre from radiology, as the neurosurgical ones were locked away and the rest of theatre leads were in use).
   Consider a thyroid guard as you will be inside the procedure room throughout.
   Also, you might be asked to wear a radiation assessment ring, headband and badge, which must be put on before PPE.





6. Induce anaesthesia and prepare for transfer.

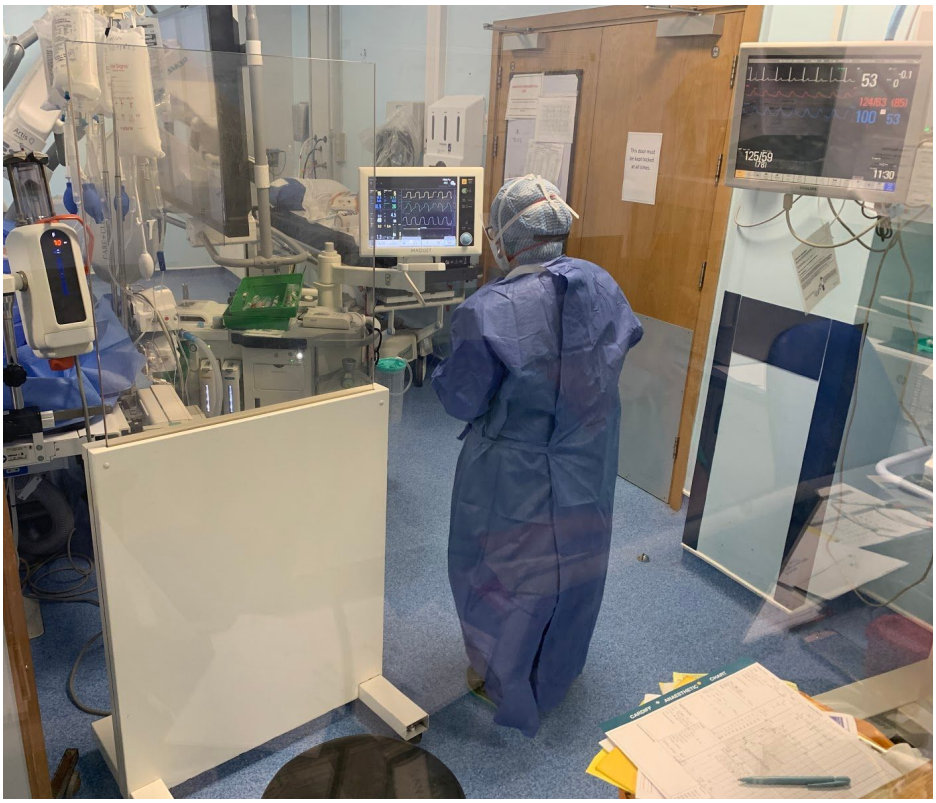


The RAE (south facing) tube is easy to clamp for change of ventilators. Today we used under-and-over sleek (one strip of sleek directly on the chin and face, then the tube over the sleek, then another strip of sleek over the ETT and the previous strip). It's very secure and doesn't interfere with ETT clamping.

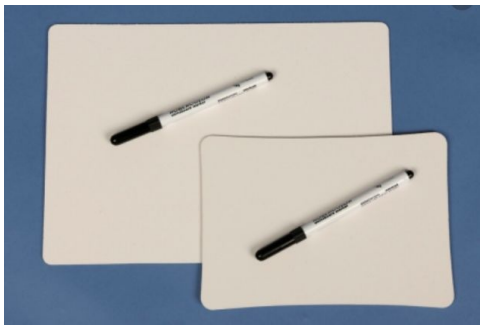
7. Transfer to X-ray

8. Once in the neurovascular suite, you will have fewer people than usual to transfer the patient to the x-ray table.

9. Position your sitting/writing spot behind the radio-protective screen and in such a way that you can see the monitor and the machine comfortably.



10. Get the small white board and pen to communicate with the clean area, as the sound is not very clear when wearing PPE.



11. Once the case is finished, go back to main theatre for extubation. One of the radiology nurses will help you with the transfer.

12. Don’t forget to arrange for the leads and radiology badges to be returned to their original place!

CDN, 10th April 2020.