GUIDELINE:

I-STAT use in NNU and Maternity

SCOPE:
Nurses and Midwives working in Maternity and Neonatal Unit

PURPOSE:
To inform all midwives and nurses working in the maternity and neonatal unit of use of the i-STAT Alinity instrument to measure arterial, venous and capillary blood gases and umbilical cord blood gases

DEFINITION:
The Abbott i-STAT is a portable analyser designed to be used at the bedside for critical care tests.

Celsius- °C

GUIDELINE:
1. Staff will receive training on how to use the device before attempting to do so.
2. Staff will use their hospital identification number (as on their pay slip) to identify themselves as the user
3. The i-STAT will be stored on NNU on a dedicated trolley which can be transported to the site where blood sampling is done so there are no delays in testing
4. Cartridges
   - i-STAT cartridges for the hospital are held in the Emergency Dept. and will have had control checks done prior to being collected.
   - Each department will be billed for the cartridges that are collected for use.
   - Maternity will provide, label and store 2 cartridges in the drawer of the trolley for their cord blood gases and replace as used so each department can be correctly billed for use of cartridges
   - i-STAT cartridges are kept in the fridge in NNU and the medication fridge in maternity where the temperature is monitored.
   - They must be stored at 2°-8° degrees °C.
   - The pouched cartridge must be at room temperature 18°-30° degrees °C prior to use for at least 5 minutes.
   - The indicated shelf life for the pouched cartridge at room temperature is indicated on the packaging.
   - 2 pouched cartridges for performing blood gases (CG4+) will be kept at room temperature so they are available for immediate testing. These have a 2 month expiry at room temperature.
   - The date and expiry at room temperature must be written on the pouch.
   - Cartridges cannot be returned to the fridge once out for 5 minutes.
5. Use of each pouched cartridge is recorded in the note book on the trolley
6. The printed result is placed in the patient notes. It is worthwhile to photocopy the results slip as the printing will deteriorate and become illegible.

7. Guidance on cartridge filling can be found on https://www.youtube.com/watch?v=Bv3Gjo8jS6w

8. When collecting arterial, venous or capillary blood samples please record the patient’s **temperature, oxygen saturations and Fi O2** and what respiratory support (if any) is in use.

9. The staff member who is collecting the sample is responsible for processing it or asking an i-Stat trained colleague to do so. NNU staff are able assist if their workload permits.

10. Standard precautions should be taken whenever working with blood.

11. Dispose of used cartridges and syringes used for blood collection in the Biohazard waste.

12. Great care should be taken cleaning the device to avoid damage to sensitive areas.- refer to quick reference guide p.24

13. Ensure area is clean and tidy after use and trolley is returned and the i-STAT and printer are plugged in to charge in NNU.

**REFERENCES**

i-STAT Alinity quick reference guide 2016

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