REFERENCE FOR USING THE TRANSPAC TRANSDUCER AND SAFESET: Closed Blood Sampling System

Set-up and Priming

Perform Hand Hygiene & PPE.
- Remove kit from sterile package and secure all connections.
- For priming use gravity or pump pressure only.
- Activate flow of IV fluid and squeeze the flush device to prime.
- Clear the monitoring system of air through the zeroing stopcock of the transducer.
- Change the white vented cap to a non vented cap.
- Release the locking mechanism on the SafeSet™ in-line reservoir by depressing the ridged area of the plunger clip.
- Pull the in-line reservoir plunger back to minimum 2 mls.
- Hold the SafeSet™ in-line reservoir in the upright position with the tip pointed up.
- Activate the flush device. Check for adequate removal of any air bubbles at the tip of the SafeSet™ reservoir, allowing fluid to go past the 1-way stopcock distal to the SafeSet™ reservoir.
- "Close" the SafeSet™ reservoir until it is in the locked position. Continue to flush until all air is cleared from the system.
- Attach the male luer to the patient's catheter being certain not to introduce air into the system during the connection procedure.
- Level & Zero according to hospital policy

Obtaining a Blood Sample

- Ensure that sampling stopcock Off-handle is pointing opposite the blue sampling valve in the open Position.
- Release the locking mechanism of the SafeSet™ in-line reservoir by depressing on the ridged area of the plunger clip.
- Pull back on the plunger slightly to fill. Fill the reservoir no faster than 1 ml per second to avoid occlusion of the catheter.
- The rate of blood withdrawal and return for discard and sampling should approximate 1ml / sec.
- Once an appropriate discard volume has been obtained in the SafeSet™ in-line reservoir, turn "off" the one-way stopcock integral to the reservoir. This is done by turning the handle perpendicular to the tubing.
- Swab blue sampling valve per hospital policy.
- Rotate handle on blue sampling valve OFF to the transducer
- Attach sampling device to blue sampling valve with push & twist motion.
- Take required sample
- Rotate Off-handle on sampling stopcock Off to the blue valve (Monitoring/Disconnect Position) and detach syringe, aspirating slightly on syringe plunger.
- Swab the blue sampling valve per hospital policy.
- Turn the one-way stopcock distal to the sampling port back to the "ON" position (handle of the stopcock parallel to the patient line).
- Rotate off handle on blue sampling valve to the open position for the return of the discard &
flushing of the line.

- Return the fluid contained in the SafeSet™ in-line reservoir back to the patient by slowly pressing down on the plunger. Return the reservoir volume to the patient at a rate of 1 ml per second, until the plunger reaches its locked position.
- Once the SafeSet™ in-line reservoir is in the locked position, activate the flush device until the line is clear of all blood.

COMPETENCY

1. Preparation
   - Identifies the components & features of a Transducer & the SafeSet System
   - Discusses the difference between turbulent & laminar flow in relation to priming & using the system
   - Identifies correct discard volume & rationale for SafeSet System in relation to PBM
   - Prepares the equipment necessary for set up or blood sampling (as appropriate)

2. Information to Customer / patient
   - Informs the patient and states the purpose of the procedure

3. Performance
   SET UP
   - Performs hand hygiene
   - Opens sterile package, checks all connections
   - Primed under gravity only
   - Primed to transducer & replaces vented cap with non-vented cap
   - Unlocks SafeSet Reservoir & opens to appropriate volume for priming (min 2mls)
   - Holds reservoir in correct position with wings at the bottom, tip pointing up
   - Activates flush device until priming fluid exits reservoir past one way stop cock & all air is expelled
   - Ensures all air is removed from reservoir
   - Closes reservoir into locked position
   - Continues to prime the remainder of the line
   - Ensures line is primed & air free
   - Inflates pressure bag to 300mmHg
   - Attaches to patient using aseptic technique
   - Levels & Zeroes transducer according to hospital policy

BLOOD SAMPLING
Collects appropriate sampling device & equipment for blood collection
• Turns monitor alarm off
• Washes hands and dons gloves & PPE as per hospital policy
• Ensure blue sampling valve handle is in correct position (OPEN)
• Releases locking mechanism and pulls back slowly, no faster than 1ml/sec
• Withdraws twice the dead space into the reservoir
• Turn off the one way stopcock OFF at tip of SafeSet Reservoir
• Cleans blue sampling valve with alcohol & chlorhexidine swab as per hospital policy
• Ensures handle of blue valve is OFF to transducer
• Inserts sampling device with correct push & twist motion
• Takes appropriate sample, allowing to fill passively
• Rotates handle on blue sampling valve off & demonstrates correct removal technique
• Cleans the blue sampling valve
• Opens the tap(s) and returns patients’ blood at appropriate speed (1ml/sec) by pressing on the plunger until it reaches the locked position
• Demonstrates flushing of the line and blue sampling valve until clean

4. Safety
• Maintains the principles of asepsis & use of appropriate PPE through the procedure
• Ensures patients circulation and neurovascular observations intact

5. Completion
• Turns monitor alarm back on
• Ensures arterial line waveform & readings visible
• Discards all equipment according to hospital policy
• Washes hands

6. Documentation
• Records line change (if applicable) & intra flow fluid documentation as per hospital policy

References


