Invasive Flush Systems

Pressurised infusion systems used to maintain patency of arterial, central venous and pulmonary artery lines.

Staff setting up pressurised flush system must have completed relevant competency assessment either as part of Management of Central and Arterial line package or as separate stand alone competency.

Standard fluid used for flush systems is **Sodium Chloride 0.9%** in either 500ml or 1l bags.

SERIOUS HARM CAN OCCUR FROM USE OF ANY OTHER FLUID

Procedure for priming flush system

Action	Rationale
Collect sterile packed system, ensuring system used matches invasive line. RED line marker and stopcocks for arterial lines, BLUE, for Central venous lines and YELLOW for Pulmonary artery catheters. In the event of stock shortages use clear white flush systems and clearly mark 'ARTERIAL', 'CENTRAL' or 'PAC'.	To ensure medications are not inadvertently injected into arterial system
Check and confirm 0.9% Sodium Chloride	To prevent harm to patient
Wash hands	To prevent cross infection
Open pack and using non touch technique connect bag of 0.9% Sodium Chloride to the infusion chamber of the transducer.	To prevent cross infection
Fit fluid bag into pressure bag and inflate to 300mmHg	To deliver continuous pressurised flush
Fill the fluid chamber half way then prime the system using pull device at transducer	To maintain consistent pressure
Replace temporary caps at three way taps with spares in pack	To make system air tight
Check leur locks are not over tightened or loose	To prevent damage to fittings or haemorrhage
Ensure that the system is free of air.	To prevent the risk of air embolus and to promote accurate readings.
Perform pre test - Operate the flush device for 2-3 seconds. Leave space in the drip chamber. During flushing, fluid should flow freely from the end of the set and fluid flow will be visible in the drip chamber. After flushing fluid should not be visibly flowing from the set and flow in the drip chamber should be about 4drops /min	To ensure transducer working correctly
Place sterile cap on end of transducer ready for attachment to invasive device.	To maintain sterility of system
Label line with Date & Time	
Flush system integrity and fluid should be confirmed during routine shift start/handover checks	To ensure transducer remains functioning correctly
If flush bag empties the whole flush system should be changed.	To reduce risk of infection

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