Clinical Practice Procedures: Drug administration/ Priming of an Alaris™ (gravity flow) giving set

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Purpose | To ensure a consistent procedural approach to the Priming of an Alaris™ (gravity flow) giving set.
Scope | Applies to all QAS clinical staff.
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Intravenous (IV) therapy is the administration of fluid and electrolytes directly into the patient’s circulatory system through a vein, facilitated by the use of infusion devices. Infusion devices are used extensively in paramedic practice. Meticulous attention and the adoption of a routine procedure in regards to the priming of an IV device will minimise the likelihood of air entrainment, reducing the risk of air embolus.

**Indications**

- To prepare an Alaris™ giving set prior to the administration of fluids via an appropriately placed cannula.

**Contraindications**

- Nil

**Complications**

- Air embolism
- Infection
Procedure - Priming of an Alaris™ (gravity flow) giving set

1. Remove the giving set from the packaging.
2. Ensure air vent is closed.
3. Reposition the flow regulator roller clamp immediately below the drip chamber.
4. Close the flow regulator roller clamp.
5. Remove and discard the safety cap from the Viaflex® plastic container in preparation for spiking.
6. Remove and discard the giving set's spike protector.
7. Whilst maintaining aseptic technique invert the Viaflex® plastic container vertically and gently insert the giving set’s spike downwards into the port.
8. Hang or hold the Viaflex® plastic container in an upright position.

9. Gently squeeze and release the drip chamber until it is filled to a level that completely covers the filter.

10. Open the roller clamp and slowly prime the tubing until fluid drops from the patient connection port. Priming slowly helps minimise turbulence that can cause air bubbles to form.

11. Inspect the SmartSite™ valve to ensure no air bubbles are visible. If air bubbles are visible, briskly tap the valve until all air bubbles are dislodged and have been released from the tubing.

12. Close the roller clamp.

13. Remove the giving set’s patient connection cap and connect to the patient’s cannula or primed Alaris™ 2-way extension set.

14. Administer fluids as necessary.

**Additional information**

- When administering fluids from a non-collapsible container (e.g. sodium bicarbonate or hydroxocobalamin) the air vent may be opened AFTER priming the drip chamber to assist with flow. If additional non-collapsible containers are required for administration, the air vent must be closed during the spiking process.

- Prior to the spiking of additional fluid containers, officers must ensure that the flow regulator clamp is closed and the filter within the drip chamber is covered completely by fluid.

- Unused/new bags of fluid are only to be primed. Under NO circumstances are partially full compressible fluid containers (e.g. sodium chloride 0.9%) to be ‘re-spiked’.

- The only role for pressure bags is with invasive pressure monitoring lines (e.g. arterial and central venous pressure monitoring) for cases involving a retrieval doctor.

- If increased flow is required, officers may GENTLY squeeze the fluid container whilst simultaneously ensuring that the filter within the drip chamber is covered completely by fluid.