THE STUDY VAULT

Clinical Chaos

IV Infusion

SKILL SNAPSHOT

Purpose
- Safely delivers prescribed fluids or medication through a patent vascular access device at an accurate rate.

When to use
- Hydration, electrolyte replacement, medication, blood products, nutrition, or continuous/intermittent therapy as ordered.

Supplies needed
- Ordered solution/medication; compatible tubing; pump; alcohol/CHG caps or scrub; flush; label; PPE; drug reference and filter/light protection if required.

PREP + PATIENT SETUP

- Verify order, indication, allergies, dose/concentration, rate, duration, labs, and patient-specific limits.
- Inspect bag for leaks, particles, expiration, and correct solution; check compatibility.

VAULT TIP

- Before pressing START, trace the entire line with your hand from the bag to the patient.

STEP-BY-STEP

1. Hand hygiene; identify patient with two identifiers; explain therapy.
2. Perform medication rights and required independent double-checks. Compare product label with MAR/order.
3. Close clamp. Spike bag aseptically without touching sterile ends; fill drip chamber and prime tubing completely, removing air.
4. Label bag/tubing with date, time, initials, and beyond-use/tubing-change information per policy.
5. Disinfect needleless connector using approved friction and drying time; do not touch after cleaning.
6. Assess patency using facility-approved technique. Never force a flush; stop for resistance, pain, swelling, or leakage.
7. Connect tubing aseptically and secure connections. Place pump at appropriate height and route tubing safely.
8. Program pump with correct channel, drug/solution, concentration, dose/rate, volume to be infused, and limits. Use drug library when available.
9. Trace the line from bag to patient before starting. Confirm route, lumen, compatibility, clamps, and that no line is connected to an unintended access.
10. Start infusion; observe site and pump. Reassess patient shortly after initiation and after any rate/bag change.
11. Monitor site for infiltration, extravasation, phlebitis, infection, bleeding, occlusion, and dislodgement; monitor response, I&O, labs, and fluid status.
12. For an alarm, assess patient and trace the line; never silence repeatedly without correcting the cause.
13. At completion, stop pump, clamp/disconnect aseptically, flush/lock as ordered, dispose safely, and reassess.

SAFETY REMINDERS

- Stop infusion for suspected infiltration/extravasation; leave catheter in place initially if aspiration/antidote may be required.
- Use pump and independent double-check for high-alert infusions per policy.
- Never force a flush or bypass pump safeguards.
- Watch for fluid overload: dyspnea, crackles, edema, rising BP/JVD.

COMMON MISTAKES

- Programming rate as volume or wrong concentration.
- Skipping compatibility and line trace.
- Connecting before antiseptic dries.
- Treating repeated occlusion alarms without site assessment.

DOCUMENTATION

- Solution/drug, concentration, route/lumen.
- Rate, volume, start/stop times, pump settings.
- Site/device assessment and patency.
- Patient response, I&O, labs/vitals as relevant.
- Teaching, complications, interventions, notifications.