

INTERVENTIONS THAT RNS IN ADULT CRITICAL CARE HAVE THE AUTHORITY TO ORDER BY DELEGATED MEDICAL DIRECTIVE AND CONDITIONS FOR ORDERING

LABORATORY INVESTIGATIONS

HEMATOLOGY:

CBC

- With evidence of bleeding
- Following blood transfusion
- Fever or clinical signs of infection

INR/PTT

- Prior to any procedure with risk of bleeding, unless test result from less than 4h is available
- With evidence of bleeding
- Following treatment for elevated INR/PTT

CHEMISTRY:

Extended electrolytes and ionized calcium (based on electrolyte indicated)

- Following administration of electrolyte bolus or during hypertonic saline administration
- Myocardial irritability or arrhythmia
- Significant change in urine output
- High gastric output or diarrhea
- Prolonged QT

Glucose

- Any sudden change in neurological status, diaphoresis, shakiness
- Q20 minutes after treatment for a low blood sugar until greater than 4 mmol/L

Urea/Creatinine

- Sudden change in patient's condition or urine output

Lactate

- To reassess response 2-4h after treatment initiation or change if lactate was previously elevated
- Any indication of possible shock

CK/Troponin

- New chest pain or ST or T wave changes
- CK to assess treatment for rhabdomyolysis

ALT/AST/Alkaline Phosphatase, Bilirubin

- Sudden change in patient's clinical status or to reassess abnormal results

Blood Gases to assess acid/base balance

(arterial or venous if arterial unavailable)

- Post intubation/extubation
- Signs of respiratory distress
- Myocardial irritability
- Significant change in respiratory status or minute volume
- Post proning/supination
- After initiation of End tidal Carbon Dioxide (EtCO₂) monitoring to determine baseline Et-PaCO₂ gradient

Venous Oxygen Saturation

- Post insertion of a central venous line or pulmonary artery catheter
- Reassessment following treatment to improve oxygen delivery
- Reassessment following changes to vasoactive medication

MICROBIOLOGY:

Blood cultures as per protocol

(minimum 2 sets)

- For new or worsening signs of infection
- Sputum culture for new or worsening signs of infection
- Urine Culture for new or worsening signs of infection

BLOOD TRANSFUSION:

Group and Screen

- On admission
- For patients at risk of bleeding
- When new sample required

MEDICAL IMAGING:	NON-INVASIVE CARDIOLOGY:
<p>Chest Xray (Chest Xrays are only done when there is an indication)</p> <ul style="list-style-type: none"> • Following insertion of central line, Nasogastric (NG) feeding tube, chest tube, intubation, tracheostomy • Signs of respiratory distress • Following ETT repositioning • 1 to 4h hours following chest tube clamping or removal 	<p>12 Lead ECG</p> <ul style="list-style-type: none"> • Chest pain, other signs and symptoms of ischemia, or changes on bedside monitor • New and uncertain rhythm • To evaluate QTc
MEDICATION ADMINISTRATION:	IV THERAPY:

50% Dextrose

Treating Hypoglycemia

- Do not wait for a laboratory confirmation result to be reported before treating a low POC glucose; treat a low blood glucose STAT
- For any blood glucose reading of 2.5-3 mmol/L, administer 12.5 grams dextrose (25 ml of **50% Dextrose**) IV STAT
- For any blood glucose reading of less than 2.5 mmol/L, administer 25 grams dextrose (50 ml of **50% Dextrose**) IV STAT
- Recheck POC glucose every 20-30 minutes and repeat dextrose bolus as indicated above until blood glucose is greater than 4 mmol/L

For Non-Diabetics or Type II Diabetics

- Wait one hour after blood glucose is greater than 6.5 mmol/L before restarting Intensive Insulin Protocol

For Patients who are Type I Diabetics

- For hypoglycemia in Type I Diabetics, temporarily stop the insulin infusion and administer dextrose as indicated above. **Notify ICU provider STAT** for orders for basal insulin and/or carbohydrate infusion rate adjustment.
- Patients with Type I Diabetes require a basal rate of insulin (either by continuous IV infusion or long acting insulin such as glargine (Lantus) or detemir (Levemir)).
- Minimal insulin doses and/or higher carbohydrate doses (via IV or enteral routes) may be required to maintain normoglycemia.

Saline Lock

- May initiate saline lock to peripheral or central lines as needed