

ALKALOSIS

MEASURE ARTERIAL pH
and ARTERIAL BLOOD GASES

Arterial pH < 7.46

$\text{HCO}_3^- > 26 \text{ meq/L}$

PATIENT HAS A
METABOLIC
ALKALOSIS

CAUSED BY:

- Excessive gastric losses
- Exogenous alkali
- Drugs such as diuretics and steroids
- Renal dysfunction
- Endocrine causes such as Cushing's disease and hyperaldosteronism

• Serum [Cl]
typically < 95 meq/L

REPLACE WITH
SALINE AND
KCL

If, after treating for above
conditions,

**ALKALEMIA PERSISTS
then:**

$\text{PaCO}_2 > 40 \text{ mm Hg}$

PATIENT HAS A
RESPIRATORY
ALKALOSIS

- Rx
Treat underlying causes
- Pain
 - Anxiety
 - Early sepsis

- ENSURE THAT POTASSIUM AND MAGNESIUM DEFICITS ARE CORRECTED
- CONSIDER TREATMENT WITH CARBONIC ANHYDRASE INHIBITOR (i.e., Diamox 250 mg t.i.d.) TO INCREASE HCO_3^- EXCRETION