

Fluid, Electrolyte, and Acid Base

Part 7 Sample Arterial Blood Gas Analyses

Normal Arterial Blood Gas Values

- pH 7.35-7.45
- PO₂ (mmHg) >80
- PCO₂ (mmHg) 32-45
- HCO₃⁻ (mEq/L)
- Anion gap (mEq/L) 10-18

Sample ABGs

- pH 7.45
- PCO₂ 65
- PO₂ 90
- HCO₃⁻ 34
- Clinical condition?

Sample ABGs

- pH 7.35
- PCO_2 60
- PO_2 60
- HCO_3^- 34
- Clinical condition?

Sample ABGs

- pH 7.33
- PCO_2 76
- PO_2 66
- HCO_3^- 40
- Clinical condition?

Sample ABGs

- pH 7.20
- PCO_2 60
- PO_2 60
- HCO_3^- 18
- Clinical Condition?

Case

- 49yo wf, 5'4", 84 lb
- DX right renal cell carcinoma (T4 M1 N0)-mets to liver, R hemidiaphragm
- HPI-6/01-n,v, unsteady gait, lethargy; hospitalized-dehydration, cachexia, hypercalcemia
- Testing-CT of abd-RUQ renal mass, ? Liver inv.; bone scan normal; head CT-neg.
- Exp. Lap.-multiple pulmonary nodules, unresectable renal tumor; highly invasive

Case

- 10/01-readmitted-protein calorie malnutrition and hypercalcemia; n,v, dehyd., low grade f
- TX-TPN, IV, hypercalcemia tx-etridonate
- CT scan-significant tumor necrosis w ascites
- PMH-hysterectomy, appendectomy, smoker, usual childhood illnesses, NKA, no ETOH or drugs
- Family hx-
