

QUESTION

1. A patient with a long history of chronic kidney disease (CKD) is being treated with a diuretic. The patient's serum sodium level is 125 mEq/L. The patient's serum potassium level is 2.5 mEq/L. The patient's serum calcium level is 8.5 mg/dL. The patient's serum magnesium level is 0.5 mg/dL. The patient's serum phosphate level is 1.5 mg/dL. The patient's serum bicarbonate level is 18 mEq/L. The patient's serum creatinine level is 2.5 mg/dL. The patient's serum urea nitrogen level is 15 mg/dL. The patient's serum albumin level is 3.5 g/dL. The patient's serum total protein level is 6.5 g/dL. The patient's serum globulin level is 3.0 g/dL. The patient's serum ferritin level is 100 ng/mL. The patient's serum transferrin level is 2.5 g/L. The patient's serum transferrin saturation level is 10%. The patient's serum iron level is 50 µg/dL. The patient's serum total iron-binding capacity level is 500 µg/dL. The patient's serum transferrin receptor level is 2.5 ng/mL. The patient's serum transferrin receptor level is 2.5 ng/mL. The patient's serum transferrin receptor level is 2.5 ng/mL.

Parameter	Value	Reference Range
Serum Sodium	125 mEq/L	135-145 mEq/L
Serum Potassium	2.5 mEq/L	3.5-5.0 mEq/L
Serum Calcium	8.5 mg/dL	8.8-10.0 mg/dL
Serum Magnesium	0.5 mg/dL	0.7-1.0 mg/dL
Serum Phosphate	1.5 mg/dL	2.5-4.5 mg/dL
Serum Bicarbonate	18 mEq/L	22-28 mEq/L
Serum Creatinine	2.5 mg/dL	0.6-1.2 mg/dL
Serum Urea Nitrogen	15 mg/dL	7-20 mg/dL
Serum Albumin	3.5 g/dL	3.5-5.0 g/dL
Serum Total Protein	6.5 g/dL	6.0-8.0 g/dL
Serum Globulin	3.0 g/dL	2.0-3.5 g/dL
Serum Ferritin	100 ng/mL	50-200 ng/mL
Serum Transferrin	2.5 g/L	2.0-4.0 g/L
Serum Transferrin Saturation	10%	20-50%
Serum Iron	50 µg/dL	50-150 µg/dL
Serum Total Iron-Binding Capacity	500 µg/dL	250-500 µg/dL
Serum Transferrin Receptor	2.5 ng/mL	1.0-2.0 ng/mL

2. A patient with a long history of chronic kidney disease (CKD) is being treated with a diuretic. The patient's serum sodium level is 125 mEq/L. The patient's serum potassium level is 2.5 mEq/L. The patient's serum calcium level is 8.5 mg/dL. The patient's serum magnesium level is 0.5 mg/dL. The patient's serum phosphate level is 1.5 mg/dL. The patient's serum bicarbonate level is 18 mEq/L. The patient's serum creatinine level is 2.5 mg/dL. The patient's serum urea nitrogen level is 15 mg/dL. The patient's serum albumin level is 3.5 g/dL. The patient's serum total protein level is 6.5 g/dL. The patient's serum globulin level is 3.0 g/dL. The patient's serum ferritin level is 100 ng/mL. The patient's serum transferrin level is 2.5 g/L. The patient's serum transferrin saturation level is 10%. The patient's serum iron level is 50 µg/dL. The patient's serum total iron-binding capacity level is 500 µg/dL. The patient's serum transferrin receptor level is 2.5 ng/mL. The patient's serum transferrin receptor level is 2.5 ng/mL. The patient's serum transferrin receptor level is 2.5 ng/mL.

ANSWER



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