

QUESTION

1. A patient with a long history of chronic kidney disease (CKD) is admitted to the hospital with acute kidney injury (AKI). The patient's baseline creatinine was 2.5 mg/dL, and the current creatinine is 4.5 mg/dL. The patient is on dialysis. The patient's blood urea nitrogen (BUN) is 30 mg/dL. The patient's potassium is 5.5 mEq/L. The patient's calcium is 8.5 mg/dL. The patient's phosphate is 6.5 mg/dL. The patient's bicarbonate is 18 mEq/L. The patient's hemoglobin is 10 g/dL. The patient's hematocrit is 30%. The patient's white blood cell count is 12,000/mm³. The patient's platelet count is 100,000/mm³. The patient's prothrombin time (PT) is 15 seconds. The patient's partial thromboplastin time (PTT) is 45 seconds. The patient's international normalized ratio (INR) is 1.5. The patient's activated partial thromboplastin time (APTT) is 40 seconds. The patient's fibrinogen is 200 mg/dL. The patient's D-dimer is 1.5 mg/L. The patient's creatinine clearance (CrCl) is 15 mL/min. The patient's estimated glomerular filtration rate (eGFR) is 15 mL/min/1.73 m². The patient's urine output is 200 mL/day. The patient's urine creatinine is 20 mg/dL. The patient's urine BUN is 30 mg/dL. The patient's urine potassium is 5.5 mEq/L. The patient's urine calcium is 8.5 mg/dL. The patient's urine phosphate is 6.5 mg/dL. The patient's urine bicarbonate is 18 mEq/L. The patient's urine hemoglobin is 10 g/dL. The patient's urine hematocrit is 30%. The patient's urine white blood cell count is 12,000/mm³. The patient's urine platelet count is 100,000/mm³. The patient's urine PT is 15 seconds. The patient's urine PTT is 45 seconds. The patient's urine INR is 1.5. The patient's urine APTT is 40 seconds. The patient's urine fibrinogen is 200 mg/dL. The patient's urine D-dimer is 1.5 mg/L.

Parameter	Normal Range	Patient Value
Creatinine	0.6-1.2 mg/dL	4.5 mg/dL
BUN	7-20 mg/dL	30 mg/dL
Potassium	3.5-5.0 mEq/L	5.5 mEq/L
Calcium	8.8-10.0 mg/dL	8.5 mg/dL
Phosphate	2.5-4.5 mg/dL	6.5 mg/dL
Bicarbonate	22-28 mEq/L	18 mEq/L
Hemoglobin	12-16 g/dL	10 g/dL
Hematocrit	37-47%	30%
WBC	4,000-11,000/mm ³	12,000/mm ³
Platelets	150,000-400,000/mm ³	100,000/mm ³
PT	11-13.5 seconds	15 seconds
PTT	25-35 seconds	45 seconds
INR	0.8-1.1	1.5
APTT	28-35 seconds	40 seconds
Fibrinogen	200-500 mg/dL	200 mg/dL
D-dimer	<0.5 mg/L	1.5 mg/L
CrCl	>30 mL/min	15 mL/min
eGFR	>30 mL/min/1.73 m ²	15 mL/min/1.73 m ²
Urine Output	>300 mL/day	200 mL/day
Urine Creatinine	>20 mg/dL	20 mg/dL
Urine BUN	>20 mg/dL	30 mg/dL
Urine Potassium	>5.0 mEq/L	5.5 mEq/L
Urine Calcium	>8.0 mg/dL	8.5 mg/dL
Urine Phosphate	>4.0 mg/dL	6.5 mg/dL
Urine Bicarbonate	>20 mEq/L	18 mEq/L
Urine Hemoglobin	<10 g/dL	10 g/dL
Urine Hematocrit	<30%	30%
Urine WBC	<10,000/mm ³	12,000/mm ³
Urine Platelets	>150,000/mm ³	100,000/mm ³
Urine PT	<15 seconds	15 seconds
Urine PTT	<35 seconds	45 seconds
Urine INR	<1.1	1.5
Urine APTT	<35 seconds	40 seconds
Urine Fibrinogen	>200 mg/dL	200 mg/dL
Urine D-dimer	<0.5 mg/L	1.5 mg/L

2. A patient with a long history of chronic kidney disease (CKD) is admitted to the hospital with acute kidney injury (AKI). The patient's baseline creatinine was 2.5 mg/dL, and the current creatinine is 4.5 mg/dL. The patient is on dialysis. The patient's blood urea nitrogen (BUN) is 30 mg/dL. The patient's potassium is 5.5 mEq/L. The patient's calcium is 8.5 mg/dL. The patient's phosphate is 6.5 mg/dL. The patient's bicarbonate is 18 mEq/L. The patient's hemoglobin is 10 g/dL. The patient's hematocrit is 30%. The patient's white blood cell count is 12,000/mm³. The patient's platelet count is 100,000/mm³. The patient's prothrombin time (PT) is 15 seconds. The patient's partial thromboplastin time (PTT) is 45 seconds. The patient's international normalized ratio (INR) is 1.5. The patient's activated partial thromboplastin time (APTT) is 40 seconds. The patient's fibrinogen is 200 mg/dL. The patient's D-dimer is 1.5 mg/L.

ANSWER



3. A patient with a long history of chronic kidney disease (CKD) is admitted to the hospital with acute kidney injury (AKI). The patient's baseline creatinine was 2.5 mg/dL, and the current creatinine is 4.5 mg/dL. The patient is on dialysis. The patient's blood urea nitrogen (BUN) is 30 mg/dL. The patient's potassium is 5.5 mEq/L. The patient's calcium is 8.5 mg/dL. The patient's phosphate is 6.5 mg/dL. The patient's bicarbonate is 18 mEq/L. The patient's hemoglobin is 10 g/dL. The patient's hematocrit is 30%. The patient's white blood cell count is 12,000/mm³. The patient's platelet count is 100,000/mm³. The patient's prothrombin time (PT) is 15 seconds. The patient's partial thromboplastin time (PTT) is 45 seconds. The patient's international normalized ratio (INR) is 1.5. The patient's activated partial thromboplastin time (APTT) is 40 seconds. The patient's fibrinogen is 200 mg/dL. The patient's D-dimer is 1.5 mg/L.