

## Nephrology Resident Pre-Test

Name:

Date:

Directions:

The following 50 questions are in single-best answer format. Use this form to record your answers.

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## **Nephrology Resident Pre-Test**

**1**

You are called to evaluate a patient in the surgical intensive care unit for acute renal failure.

He is a 54 year old male with a history of diabetes, proteinuria, and a baseline serum creatinine of 1.8 who presented with unstable angina and taken to the cardiac catheterization lab on the day of admission; he received a total of 300 cc contrast. On hospital day #2 he was taken to the OR for CABG. The anesthesia report notes that he received a gram of cefazolin pre-op, and had prolonged hypotension and cross-clamp time; he was returned to the SICU still on cardiopulmonary bypass with an intra-aortic balloon pump in place. Serum creatinine two days post-op was 1.7. It is now hospital day #10 and his serum creatinine is 6.5 and rising.

BP 90/50; lungs with diffuse rhonchi; RRR iii/vi systolic murmur; abd benign; cool extremities with 2 mm edema noted; UA shows 2+ protein, 2+ blood, many pigmented casts. Fractional excretion of sodium is calculated at 4%. Given the above data, what is the most likely cause of his renal failure?

- A cholesterol emboli
- B allergic interstitial nephritis
- C prerenal azotemia
- D contrast nephropathy
- E acute tubular necrosis

**2**

A 48 year-old IV drug abuser was admitted with fever, hypotension, and bilateral infiltrates on chest film. Exam revealed evidence of volume depletion, a murmur consistent with tricuspid regurgitation, and hepatojugular reflux. Labs show:

140      106                      pH 7.39, PCO2 24, PO2 74  
4.0      14

Which of the following best characterizes this patient's disorder?

- A high anion gap metabolic acidosis and metabolic alkalosis
- B respiratory alkalosis and metabolic alkalosis
- C high anion gap metabolic acidosis and respiratory acidosis
- D high anion gap metabolic acidosis and respiratory alkalosis

**3**

The acid base process in the above question could be seen in all the following EXCEPT:

- A lactic acidosis and gram-negative sepsis
- B aspirin intoxication
- C DKA with pneumonia
- D RTA with pneumonia

**4**

You are called to evaluate a 45 year-old obese woman in the surgical ICU who has an acid-base disturbance that has puzzled the surgeons. They are adamant that the patient is not volume depleted, and the PCWP is 15 mmHg. The patient is on a ventilator, has an NG tube in place, and is receiving Ringer's lactate with 15 mM KCl. Lab studies reveal:

140      88                      pH 7.49, pCO2 50  
3.8      37                      urine pH 7.5, uNa 75, uK 88, uCl 5

This acid-base disturbance is best characterized as:

- A simple metabolic alkalosis
- B mixed metabolic alkalosis and metabolic acidosis
- C mixed metabolic alkalosis and respiratory acidosis
- D mixed metabolic alkalosis and respiratory alkalosis

**5**

A 38 year old male presents to the Emergency Department complaining of a headache and is found to have a blood pressure of 210/130. Exam reveals no fundoscopic abnormalities, clear lungs, a systolic murmur, and no edema. There is no abdominal bruit. You ascertain that he has no known family history for hypertension and that he denies drugs of abuse. Serum chemistries reveal:

141	102	28
4.5	26	1.3

Which is the most likely diagnosis?

- A Pheochromocytoma.
- B Renal artery stenosis.
- C Essential hypertension.
- D Hyperaldosteronism.

**6**

You are called by the Emergency Department for consultation on a patient who presents with the following laboratory work:

136	99	68
7.8	11	3.4

Which of the following is the best first recommendation?

- A Arrange for acute hemodialysis.
- B Albuterol nebulizer 10-20mg.
- C Calcium gluconate 10-30 mL IV push.
- D Sodium bicarbonate 100 mEq IV push.
- E Kayexelate 60 g (120cc) PO now and q4 hours.

**7**

A 32 year old, 80 Kg male weightlifter returns to clinic for follow-up of an initial evaluation for newly-discovered renal insufficiency. Laboratory data reveals a serum creatinine of 2.0; 24hr urine collection shows a volume of 1000 cc, protein of 500 mg, and creatinine of 1250 mg. His clearance is calculated as 43 ml/min. Which of the following statements are true?

- A this patient likely has interstitial nephritis
- B the creatinine clearance overestimates GFR by 75%
- C the 24 hr collection is likely incomplete
- D the protein assay may be confounded by use of dietary protein supplements
- E creatine supplements will not interfere with interpretation of these results

**8**

A 51 year old female with IgA nephropathy comes to your office for routine follow-up. She has a baseline serum creatinine of 2.1 and 700 mg/day proteinuria. Her medications include lisinopril, hydrochlorothiazide and a multivitamin. On exam, her blood pressure is 134/84; she has a normal cardiopulmonary exam, and has no dependant edema. Which of the following statements are true?

- A A low-salt diet reduces the antiproteinuric effect of ACE inhibitors.
- B Sixty percent of all patients with IgA nephropathy progress to end-stage renal disease.
- C This patient should be targets to a BP less than 140/90 for slowing progression of nephropathy.
- D This patient does not have controlled hypertension.
- E Angiotensin-II receptor antagonists should not be considered because of elevated creatinine.

**9**

A 43 year old patient with biopsy-proven focal segmental glomerulosclerosis (FSGS) with a serum creatinine of 1.7 and 2.5 g/day proteinuria comes in to your office for routine follow-up. Current medications include lisinopril 40 mg qd, atorvastatin 10 mg qhs, and furosemide 20 mg qd. He reports an intractable dry cough without other infectious symptoms. On exam, BP is 140/86. Lungs are clear. There is trace dependant edema. What is the next best step for this patient?

- A substitute amlodipine for lisinopril
- B substitute losartan for lisinopril
- C substitute doxazosin for lisinopril
- D substitute diltiazem for lisinopril
- E discontinue lisinopril and increase furosemide dose

**10**

A 35 year old female with recently-diagnosed adult onset diabetes mellitus is referred to your clinic for evaluation of proteinuria. Lab studies reveal 300 mg/day proteinuria, serum creatinine of 1.2 mg/dL, and serum potassium of 4.7 mg/dL. Her blood pressure is 135/88. Exam is normal save for trace dependant edema. Which of the following statements is true?

- A ACE inhibitors are not used in women of childbearing age due to risk of teratogenesis
- B a thiazide diuretic is the drug of first choice because of edema
- C use of ACE inhibitors is associated with slower progression of renal disease in type 2 diabetics
- D dihydropyridine calcium channel blockers are the drugs of first choice for reducing proteinuria
- E angiotensin-II receptor antagonists are superior to ACE inhibitors for reducing proteinuria

**11**

Acute interstitial nephritis has been reported in association with all the following drugs EXCEPT

- A ibuprofen
- B cefazolin
- C heparin
- D ampicillin
- E omeprazole

**12**

All of the following patients are at risk for developing destruction of the renal papillae with concomitant tubulointerstitial nephritis EXCEPT

- A a middle-aged man who drinks moonshine distilled in old automobile radiators
- B an older man with recurrent acute urinary retention from prostate hypertrophy
- C a young adult with sickle cell anemia
- D an older woman who uses analgesics for chronic headaches
- E a middle-aged woman with a history of multiple urinary tract infections and pyelonephritis

**13**

A 19 year old man is being evaluated for polydipsia and polyuria. Urine osmolality is 195,  $\text{Na}^+$  28, and  $\text{K}^+$  32. He is placed on water deprivation for 12 hours; repeat urine osmolality is 200. After a dose of DDAVP, his urine osmolality is 199. The most likely diagnosis is:

- A nephrogenic DI
- B osmotic diuresis
- C salt-losing nephropathy
- D psychogenic polydipsia
- E central DI

**14**

A 70-year old man with DM and HTN has the following serum chemistries:

Na 138 Cl 106 BUN 22  
K 5.0 CO<sub>2</sub> 20 SCr 2.0

Which medication will not contribute to worsening hyperkalemia?

- A propranolol
- B indomethacin
- C lisinopril
- D digitalis
- E carbenicillin

**15**

A 35-year old man with a history of ethanol abuse and cirrhosis is admitted with massive ascites and edema. Labs on admission include:

Na 135 Cl 95 BUN 15  
K 3.0 CO<sub>2</sub> 28 SCr 2.0

During the first hospital day he makes 400 cc of urine, with osms of 638 and Na of 6. Which of the following is most likely to be beneficial in the treatment of his sodium-avid state?

- A lasix 120 mg po bid
- B lasix 120 mg iv bid
- C mannitol iv 25 mg bid
- D paracentesis with 4 L ascites removed daily
- E bed rest and low sodium diet

**16**

The following laboratory values are obtained on a patient on your ward service who is euvolemic by exam, and is normotensive:

Na 122 Cl 88 BUN 8 gluc 122  
K 4.2 CO<sub>2</sub> 24 SCr 0.8 urine osmolality 245 mOsm/kg

These data are most consistent with

- A primary polydipsia
- B ectopic ADH production
- C congestive heart failure
- D Addison's disease
- E diabetes mellitus

**17**

In patients with chronic renal failure, all the following are important contributors to bone disease EXCEPT:

- A impaired terminal hydroxylation of 25-(OH)<sub>2</sub> cholecalciferol
- B hyperphosphatemia
- C aluminum-containing antacids
- D loss of vitamin D and calcium via dialysis
- E metabolic acidosis

**18**

A 45-year-old woman presents for follow-up for her diabetes and chronic renal insufficiency. She reports recent worsening anorexia, stable weight, increasing edema, and more frequent hypoglycemic episodes requiring adjustment of her insulin doses. Laboratory studies reveal an albumin of 2.1 mg/dl and a creatinine of 6.5. The next best step is:

- A increase dietary protein intake to 2 g/kg/day
- B discontinue insulin and begin metformin
- C add an ACE or ARB to reduce proteinuria
- D initiate hemodialysis
- E prescribe a trial of marinol for appetite enhancement

**19**

A 19-year-old US Marine presents with a one-day history of malaise and coffee-colored urine. During the next 2 days, pedal edema develops. Urinalysis reveals 4+ blood, 3+ protein, and a sediment showing many red- and white-cell casts. Serum testing shows a BUN of 40 and creatinine of 4.0. Renal biopsy reveals diffuse endocapillary proliferative lesions with infiltration of glomeruli by polymorphonuclear leukocytes. Which of the following conditions would NOT produce this clinical picture?

- A systemic lupus erythematosis
- B streptococcal infection
- C rhabdomyolysis
- D viral hepatitis
- E falciparum malaria

**20**

All the following represent potential complications of chronic hemodialysis EXCEPT:

- A tuberculosis
- B iron deficiency
- C osteomalacia
- D intradialytic hemodynamic instability
- E bacteremia

**21**

A 54 yo F is seen in the internal medicine clinic for adult-onset diabetes managed with oral agents. She develops hypertension, with average blood pressures of 150/90. Which of the following interventions is most likely to prevent progression of diabetic nephropathy?

- A Switch to Lispro insulin and metformin.
- B Routine use of i.v. volume expansion as prophylaxis for contrast nephropathy
- C Maintenance of BPs < 120/70 with nifedipine or amlodipine.
- D Maintenance of BPs < 130/80 with preferential use of ACE inhibitors
- E Dietary protein restriction to 1.5 g/kg/day.

## 22

A 77 year old male is brought to the emergency department from an adult care home for evaluation of altered mental status. No records are available. He responds to pain by grimacing and has a Glasgow coma scale of 9. Exam reveals a weight of 60 Kg, heart rate of 90, BP of 112/58 and respirations of 18. He has poor skin turgor, dry mucosae, clear lung fields and no dependent edema. Placement of a urinary catheter produces 10cc of dark urine. Laboratory work shows Na 170, SCr 3.4 and a urine specific gravity of 1.035.

The best first step is:

- A obtain head CT scan, then begin liberal p.o. water intake
- B start demeclocycline 300 mg po BID
- C infuse 4 L normal saline over 24 hrs and give a thiazide diuretic
- D infuse 18 L of half-normal saline over next 3 days
- E place a central venous catheter for hemodialysis

## 23

24 year old Asian male presents with painless gross hematuria after a 2-day hx of pharyngitis. Exam shows a BP 140/85 and pulse 88; normal physical including no oropharyngeal injection or exudate. SCr 1.4; urinalysis is remarkable for 3+ blood and 1+ protein. Rapid Strep. test is negative.

The most likely diagnosis is:

- A nephrolithiasis
- B postinfectious glomerulonephritis
- C focal and segmental glomerulosclerosis
- D IgA nephropathy
- E minimal change disease

## 24

A 42 year old male presents to your clinic complaining of new-onset lower extremity edema. He is HIV-seropositive with a CD4 count of 250 and a suppressed viral load on medications. He is HCV seronegative and has no other significant medical history. Laboratory evaluation reveals a creatinine clearance of 32 cc/min and 12 g/day proteinuria. A renal biopsy is most likely to show:

- A membranoproliferative GN
- B collapsing focal and segmental glomerulosclerosis
- C cortical necrosis and vascular thrombi
- D strong IgA deposition in the mesangium
- E Kimmelstein-Wilson nodules

## 25

A 32 year old male is found on multiple urinalyses to have trace to 1+ protein and specific gravities of 1.025-1.030. He has no past medical history and does not take medications, including over-the-counter substances. An adequate 24 hr urine collection reveals 130mg/day protein. What is your next step?

- A Obtain serum and urine protein electrophoreses.
- B Obtain renal ultrasound.
- C Start an angiotensin converting enzyme inhibitor.
- D Order a glucose tolerance test and HbA1c.
- E Reassure patient that no specific treatment is necessary.

**26**

A 22 year old male presents to the emergency department with a one-day history of lower abdominal pain associated with dysuria. He has no past medical history. Exam shows a temperature of 100.5 F, midline lower abdominal tenderness without rebound or guarding, and no costovertebral angle tenderness. Serum creatinine is 1.2, WBC is 10.2, and the urinalysis demonstrates 2+ blood, positive leukocyte esterase, and no protein. You see a few RBCs, no RBC casts, and many WBCs in the urine sediment. The next best step is:

- A obtain a renal ultrasound
- B place a foley catheter and irrigate with Amphotericin-B
- C obtain a travel history from the patient
- D Gram stain the urine and obtain a sexual history from the patient
- E send urine for acid-fast bacillus stain and culture

**27**

A 24 year old Marine is brought to the emergency department after passing out during a field exercise. Initial evaluation reveals a non-hemolyzed serum K of 8.9, creatinine of 2.3, and heme-positive urine dipstick. He has had 12cc of urine output since passing out, despite one liter of LR in the field and another liter of NS in route. An EKG is obtained which reveals tall T waves and a widened QRS complex.

What is the first best step?

- A Kayexalate 120 grams PO now
- B High-dose albuterol nebulizer treatment now and in 30 minutes
- C IV calcium gluconate
- D IV dextrose and insulin
- E Placement of a hemodialysis catheter.

**28**

A patient with end-stage-renal disease on chronic hemodialysis is admitted to the hospital for community-acquired pneumonia. A chemistry panel is drawn from the patient immediately upon returning to the ward following dialysis. Which of the following statements are true?

- A Potassium of 5 to 6 is expected.
- B The hematocrit will be lower due to ultrafiltration.
- C Phosphate of 1.5 is expected.
- D The patient may be expected to be febrile for 4-6 hrs.
- E The dialysis catheter must be flushed with saline.

**29**

A 45 year old African-American female is referred to you for evaluation of hypertension. Prior clinic BPs average 150/90. Exam shows no funduscopic changes, normal cardiac exam, normal peripheral pulses, and a manual resting blood pressure of 152/94 with a pulse of 70. The best choice for initial antihypertensive medication is:

- A Valsartan
- B Hydrochlorothiazide.
- C Losartan.
- D Amlodipine.
- E Hydralazine.

**30**

All but one of the following disorders is associated with chronic respiratory alkalosis EXCEPT:

- A third trimester pregnancy
- B hepatic failure
- C sedative drug overdose
- D anxiety reaction

**31**

A 28 year old female, G2P1, at 32 weeks gestation, has a chemistry panel drawn which shows a serum creatinine of 0.5. This most likely represents:

- A normal renal function
- B poor nutrition due to protracted nausea
- C artifactual lowering of creatinine on assay
- D an early stage of preeclampsia
- E severe volume overload due to obstructive nephropathy

**32**

Which of the following laboratory values is most likely to be found in a patient who has just presented for her first check-up in 40 years and has newly been found to have near-end-stage renal disease?

- A Hemoglobin of 15
- B Intact PTH too low to detect
- C Serum calcium of 12.5
- D Serum bicarbonate of 30
- E Serum phosphate of 6.5

**33**

You are consulted on a case of acute renal failure noted in a patient on the orthopedic ward. Serum creatinine has risen from a baseline of 0.8 pre-operatively to 4.3 today, post-operative day 5. She has been receiving tramadol IV for pain control, atenolol for hypertension, and a furosemide IV drip to maintain urine output. The patient reports she has been unable to tolerate p.o. intake due to nausea and vomiting. You calculate her fractional excretion of sodium to be 0.5%. The medical student on the case asks what that number means. You tell the student:

- A it is consistent with acute tubular necrosis
- B it is consistent with prerenal azotemia
- C the FeNa is non-diagnostic given the use of furosemide
- D a FeNa of 0.5% is normal given the use of furosemide

**34**

A 55 year old male presents to your clinic complaining of mild dyspnea on exertion. He has diabetes, proteinuria, and a recent creatinine clearance of 54 cc /min. Laboratory studies show a hematocrit of 32% with an MCV of 75. What should your next step be?

- A begin erythropoietin 100 units/kg SQ weekly
- B begin FeSO<sub>4</sub> 324 mg po TID and check iron studies & epo level
- C send an erythropoietin serum level, iron, TIBC, and ferritin
- D schedule a bone marrow biopsy
- E obtain stool for guaiac testing

**35**

The leading cause of end-stage renal disease in the US is:

- A hypertensive nephrosclerosis
- B diabetic nephropathy
- C autoimmune renal diseases
- D renal injury from nephrotoxins (NSAIDs, contrast, aminoglycosides, etc.)
- E unknown

**36**

A 52 year old African-American male is referred to you for evaluation of hypertension. He is not taking any medications. Prior clinic BPs average 150/90. His family history is remarkable for diabetes, and some “kidney trouble.” There is no family history of HTN. Exam shows no funduscopic changes, normal cardiac exam, normal peripheral pulses, and no edema. His manual resting blood pressure is 145/90 with a pulse of 70. Serum chemistries reveal Na 140 K 4.4 SCr 1.2. What is the best first step?

- A Renal artery duplex Doppler ultrasound.
- B 24 hour urine collection for metanephrines.
- C Measurement of the serum renin-to-aldosterone ratio.
- D CT of the kidneys and adrenal glands.
- E Urinalysis and spot urine albumin/creatinine ratio

**37**

A 55 year old male is referred to you for elevated creatinine. A review of his records reveals a baseline SCr of 1.2 that persisted until 4 months ago. His current SCr is 2.5. He has a history of coronary artery disease, status-post cardiac catheterization and angioplasty, performed 4 months ago. His ejection fraction is 65% and he is not hypertensive. He takes aspirin, metoprolol, oral nitrates, and metformin for adult-onset diabetes mellitus. You find him to have no hematuria, proteinuria, or white blood cells on urinalysis. 24 hour urine collection shows 100 mg/day proteinuria and a creatinine clearance of 45 cc/min. ANA, C3, Hep B and C profiles, and RPR are negative. What is the most likely diagnosis?

- A Interstitial nephritis.
- B Diabetic nephropathy.
- C Membranous nephropathy.
- D Cholesterol embolism.
- E Seronegative lupus nephritis.

**38**

A 40-year old woman with chronic renal insufficiency presents to the Emergency Department with a two-week history of nausea and vomiting. She has been unable to take her usual medications. On exam, she has a blood pressure of 150/96, pulse of 112, and temperature of 37. Exam shows no JVD; she has a 2/6 systolic ejection murmur at the left sternal border but no rubs. Lungs are clear. Abdomen is benign. She is neurologically intact.

Lab studies reveal:

132	104	60	Hct 24%	Albumin 3.4 mg/dL
5.4	20	7.6		

Which of the following is the strongest indication for initiating dialysis?

- A metabolic acidosis
- B hyperkalemia
- C anemia
- D malnutrition
- E nausea and vomiting

**39**

A 54 year old man is admitted to the intensive care unit with bilateral pneumonia and sepsis. Before requiring intubation, the following labs are obtained:

144	108	20	pH 7.24	pCO2 30	pO2 88
4.5	12	1.2			

What is your interpretation of this data?

- A metabolic acidosis with respiratory compensation
- B mixed metabolic acidosis and respiratory alkalosis
- C mixed metabolic acidosis and respiratory acidosis
- D metabolic gap and non-gap acidosis with respiratory compensation
- E metabolic gap and non-gap acidosis and respiratory alkalosis

**40**

Which of the following is NOT an indication for hemodialysis?

- A phenobarbital overdose in a patient with renal insufficiency
- B BUN > 75 or SCr > 6.0
- C K<sup>+</sup> 9.0 with ECG changes and anuria
- D HCO<sub>3</sub><sup>-</sup> of 5 in a patient with volume overload despite bumetanide and metolazone use
- E anorexia, weight loss, and a serum albumin of 1.4 in a patient with chronic renal insufficiency

**41**

One of your clinic patients, a 54 year old female with type II diabetes, a baseline SCr of 2.1, and 900 mg/day proteinuria, is admitted to the cardiology service with unstable angina. A cardiac catheterization is planned, and your input is requested. Which of the following statements is correct regarding contrast-induced acute renal failure?

- A use of mannitol and half normal saline prior to contrast dose will decrease the risk of ARF
- B approximately 80% of patients with SCr > 1.5 will develop ARF post contrast
- C use of furosemide with hydration before & after contrast dose will lessen risk of ARF
- D in high-risk patients who develop ARF post-contrast, at least 60% will not recover renal function
- E diabetic nephropathy increases the risk of developing contrast nephropathy

**42**

You are called to evaluate a patient with oliguric renal failure in the intensive care unit. She underwent emergent resection of ischemic bowel two days ago, and was profoundly hypotensive and acidemic until yesterday. SCr is now 4.0 and urine output is less than 0.5 ml/kg/hr. The only other data at your disposal currently is:

urine Na 14 mEq/L                      serum Na 140 mEq/L  
urine Cr 10 mg/dL                      serum Cr 4.0 mg/dL

The chief surgical resident is persistent in asking for your immediate opinion.

What is the most likely diagnosis?

- A prerenal azotemia
- B acute tubular necrosis

**43**

You see a patient in your clinic for follow-up of her diabetic nephropathy. Six months ago, her 24 hr proteinuria was 2.1 grams. She has been started in the interim on lisinopril. Today a random urine protein is 32 mg/dL and random urine creatinine is 64 mg/dL. Your interpretation of this data is

- A the patient's proteinuria has increased
- B the patient's proteinuria has remained roughly stable
- C the patient's proteinuria has decreased
- D the results are uninterpretable.

**44**

A patient is referred to you for evaluation of recurrent nephrolithiasis. Her serum chemistries are normal. Twenty-four hour urine collection reveals:

volume 1300  
creat 1810  
Ca<sup>++</sup> 250(0-250)  
uric acid 450           (175-850)  
citrate 350           (300-700)

What is your advice to the patient?

- A maintain a calcium-restricted diet
- B take HCTZ 12.5 mg po qd
- C take potassium citrate 540 mg po bid
- D take allopurinol 300 mg po qd
- E increase p.o. water intake

**45**

A 64 year-old chronic hemodialysis patient comes to the emergency department complaining of abdominal pain. The ED physician obtains an abdominal ultrasound which shows the presence of bilateral renal cysts. The patient states her kidney failure was due to diabetes and no one had seen cysts on her last CT scan approximately 10 years ago. The most likely diagnosis is:

- A autosomal dominant polycystic kidney disease
- B autosomal recessive polycystic kidney disease
- C hematogenous seeding of squamous cell carcinoma
- D acquired cystic disease of dialysis

**46**

A 48 year old woman presents with fatigue and dyspnea. Exam reveals palpable purpura on her lower extremities. Lab work reveals SCr of 2.8, red cell casts on UA, normal C3 and C4, negative ANA, and positive ANCA. CXR is read as normal. Renal biopsy shows diffuse proliferative glomerulonephritis with crescents. The most appropriate next step is:

- A ACE inhibitor
- B high-dose corticosteroids
- C cyclosporine
- D cyclophosphamide and corticosteroids
- E plasmapheresis

**47**

A 65-year old man presents with ankle edema of 2 months duration. Exam shows BP 150/80, a loud S4, 2 mm of dependent edema, and evidence of peripheral neuropathy. Which statement about amyloidosis is true?

- A Amyloidosis is a rare cause of nephrosis in the elderly.
- B Amyloidosis is caused by tissue deposition of polyclonal immunoglobulin chains.
- C Renal ultrasound in cases of renal amyloidosis can show large echogenic kidneys.
- D No therapy is indicated for AL amyloid.

**48**

A 28-year old woman with cystic fibrosis is admitted with progressive respiratory distress. She is found to have a new RLL infiltrate on CXR. Exam shows pulse 130, respiratory rate of 30, and lung sounds consistent with pneumonia. Lab studies include:

130	86	17	pH 7.40	pCO2 69
5.2	38	0.6		

The most likely acid-base diagnosis at this time is:

- A mixed metabolic acidosis and metabolic alkalosis
- B mixed metabolic alkalosis and respiratory acidosis
- C mixed metabolic alkalosis and respiratory alkalosis
- D mixed metabolic acidosis and respiratory acidosis
- E acute respiratory acidosis

**49**

A 19 year old primigravida develops hypertension and proteinuria at 35 weeks estimated gestational age. BP is 150/105. She is placed at bed rest. The following week her BP is 150/115, and she is admitted. She denies neurologic symptoms and has no abdominal complaints. She has 2 mm dependent edema.

Lab values include

WBC 4600, Hct 29%, platelets 119K  
131    103    30    uric acid 5.6    UA 4+ protein  
3.2    18    2.1

The first best step in the management of this patient's hypertension is

- A    expectant management
- B    nifedipine p.o.
- C    labetalol i.v.
- D    MgSO<sub>4</sub> i.v.

**50**

A 73 year old female is admitted to your medicine service with a chief complaint of confusion. On exam you find her to indeed be confused, as well as hypovolemic. Lab values include:

SCr 4.5    Ca<sup>++</sup> 13.0    UA 1+ protein    Serum protein 8.7

What is the next best step?

- A    pamidronate 90 mg IV, saline IV bolus and continuous infusion
- B    Lasix 80 mg IV push, pamidronate 30 mg IV, liberal water PO
- C    IV saline bolus and infusion
- D    Hydrochlorothiazide 25 mg po, saline IV bolus and continuous infusion
- E    Lasix 80 mg IV push, saline IV bolus and continuous infusion

**51**

Mr. Jones is a 30 year-old African-American male who is 6'4", 250lbs (BSA 2.44 m<sup>2</sup>) and has an eGFR of 60 mL/min/1.73m<sup>2</sup>. Ms. Stevens is a 65 year-old Caucasian female who is 5'4", 105 lbs (BSA 1.49 m<sup>2</sup>) and has an eGFR of 98 mL/min/1.73m<sup>2</sup>. Which of the following statements is true?

- A    Mr. Jones has CKD stage 3.
- B    Mr. Jones should have medications dose-reduced for creatinine clearance range 30-60 mL/min.
- C    The absolute GFRs are the same.
- D    Ms. Stevens eGFR is likely to be more accurate than Mr. Jones'.
- E    Ms. Stevens eGFR should be adjusted upwards by approximately 20% because of her race.