

QUICK HITS : NEPHROLOGY BOARD REVIEW

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Conflict of Interest
I do hereby declare that I
have no conflict of interest
in presenting this Quiz



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NEPHROLOGY QUIZ

- ▶ Select the one best answer to the twelve stems presented and discuss the answers today
- ▶ Remember the following to effectively study for the American Board of Family Medicine Exam
 - ▶ Read the AFP Journal twice monthly
 - ▶ Take the CME Quizzes after reading each journal
 - ▶ Begin reviewing AFP Quizzes two to three months prior to the ABFM exam for the past 5 to 7 years and scan the articles
 - ▶ Attend PAFP CME regularly and use KSA courses
 - ▶ Do not cram for the ABFM exam

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NEPHROLOGY QUIZ 1

▶ A 25 yo W/M presents with fatigue, dyspnea and tachycardia. He denies abdominal pain and diarrhea. He admits to regular use of ecstasy and takes Bupropion for depression. He is alert, oriented, afebrile but hypotensive and jaundiced. U/A: blood, urobilinogen. CBC: anemia, normal platelets. Peripheral smear: schistocytes. Fibrinogen: normal. What is the best diagnosis?

- ▶ A. DIC (disseminated intravascular coagulation)
- ▶ B. HUS (Hemolytic Uremic Syndrome)
- ▶ C. Drug-induced TMA (Thrombotic Microangiopathy)
- ▶ D. TTP (Thrombotic Thrombocytopenic Purpura)

AFP: Volume 98, Number 6, pp. 354-361, September 15, 2018

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NEPHROLOGY QUIZ 2

▶ Oncologic emergencies associated with Tumor Lysis Syndrome can effect renal function. Two of these emergencies are Hypercalcemia of Malignancy and Syndrome of Inappropriate Anti-diuretic Hormone (SIADH). Which one statement is true?

- ▶ A. Tumor Lysis Syndrome occurs most commonly in patients being treated for solid tumors due to rapid cell lysis
- ▶ B. The Cairo-Bishop criteria define the extent of the Hypercalcemia of Malignancy
- ▶ C. Hypercalcemia of Malignancy occurs more commonly in acute leukemia than in Multiple Myeloma
- ▶ D. In SIADH, ADH is ectopically produced by small cell lung cancer.

AFP: Volume 97, Number 11, pp. 741-748, June 1, 2018

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NEPHROLOGY QUIZ 3

▶ Poststreptococcal glomerulonephritis is the result of infection with group A beta-hemolytic streptococcus (GABHS), an anaerobic gram positive coccus. In the United States the incidence of this complication has decreased. Which statement is false?

- ▶ A. It is now more common in patients older than 60 with debilitating conditions
- ▶ B. Use of appropriate antibiotics for treatment of pharyngitis or impetigo do not prevent poststreptococcal glomerulonephritis
- ▶ C. Prognosis is excellent for older adults but less so for children
- ▶ D. The deposition of immune complexes of antibodies to streptococcal M protein is the pathophysiologic basis for poststreptococcal glomerulonephritis

AFP: Volume 97, Number 8, pp. 517-522, April 15, 2018

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NEPHROLOGY QUIZ 4

- ▶ In a 2016 observational study of acutely ill children under 5 y.o., 2.2 % were ill due to UTIs that were subsequently confirmed by urine culture. However, only 28 of the 60 children were diagnosed initially by clinicians. In another study, the UK Diagnosis of Urinary Tract Infection in Young Children decision rules were developed, the DUTY criteria, to enhance diagnosis of this entity. Which statement regarding DUTY clinical decision rules is false.
 - ▶ A. There are two models: Model 1 includes signs and symptoms. Model 2 includes signs, symptoms and dipstick results
 - ▶ B. The presence of blood in the urine and history of prior UTI are the criteria more likely associated with the diagnosis of UTI than the other criteria
 - ▶ C. The Model 2 has the most criteria but even 9 or more points on this model yields only a slightly greater than 50 % accuracy
 - ▶ D. In young children it is difficult and costly to collect urine specimens for U/A and Culture
- AFP:Volume 97, Number 4, pp. 273-274, February 15, 2018

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NEPHROLOGY QUIZ 5

- ▶ Nephrology consultation is indicated for patients with all the following criteria except:
 - ▶ A. Estimated GFR less than 30ml. per minute per 1.73 meters squared
 - ▶ B. Evidence of rapid loss of kidney function
 - ▶ C. Persistent urine albumin/ creatinine ratio greater than 300 mg per gram
 - ▶ D. Urine protein/ creatinine ratio greater than 300 mg per gram
- AFP:Volume 96, Number 12, pp. 776-783, December 15, 2017

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NEPHROLOGY QUIZ 6

- ▶ If a false positive decreased GFR of 45 to 59 ml. per minute per 1.73 meters squared is suspected in a patient without known structural kidney disease, risk factors for Chronic Kidney Disease (CKD) or albuminuria, what is the best test to determine the inaccuracy of those results.
 - ▶ A. An estimated GFR is greater than 60 ml per minute per 1.73 meters squared recalculated with serum creatinine and serum cystatin C
 - ▶ B. A spot urine protein/ creatinine ratio of 30 mg per gram
 - ▶ C. A spot urine albumin/ creatinine ratio of 30 mg per gram
 - ▶ D. An elevated serum creatinine
- AFP:Volume 96, Number 12, pp. 776-783, December 15, 2017

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NEPHROLOGY QUIZ 7

- ▶ True statements regarding proteinuria in children include all but one of the following:
 - ▶ A. For the treatment of idiopathic nephrotic syndrome, prednisone should not be used for more than one month
 - ▶ B. Renal biopsy is not routinely indicated
 - ▶ C. Ultrasonography is an appropriate non-invasive screening test for anatomic abnormalities in patients with chronic kidney disease
 - ▶ D. Orthostatic proteinuria is the most common cause of proteinuria in children
- ▶ AFP:Volume 95, Number 4, pp. 248-254, February 15, 2017

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NEPHROLOGY QUIZ 8

- ▶ The only beneficial effect of reducing dietary salt in patients with chronic kidney disease (CKD) is:
 - ▶ A. Reduction in all-cause mortality
 - ▶ B. Reduction of proteinuria and blood pressure
 - ▶ C. Reduction in the rate of end-stage renal disease
 - ▶ D. Reduction in cardiovascular events
- ▶ AFP:Volume 95, Number 7, pp. 423-424, April 1, 2017

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NEPHROLOGY QUIZ 9

- ▶ The preferred set of medications for the treatment of severe asymptomatic hypertension in patients with stable chronic kidney disease is:
 - ▶ A. ACE Inhibitors and Calcium Channel Blockers
 - ▶ B. ACE Inhibitors and ARBs
 - ▶ C. Beta Blockers, ACE Inhibitors, ARBs
 - ▶ D. Beta Blockers, ARBs
- ▶ AFP:Volume 95, Number 8, pp: 492-500, April 15, 2017

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NEPHROLOGY QUIZ 10

- ▶ True statements regarding the management of renal calculi include all but one of the following:
 - ▶ A. Citrate salt supplementation reduces stone size to less than 5 mm and prevents new stone formation
 - ▶ B. Adverse effects of citrate salts are rash and upper gastrointestinal disturbance
 - ▶ C. Current guidelines from ACP recommend an initial increase in fluid intake to at least 2 liters per day followed by thiazide diuretics then allopurinol or citrate salts as indicated
 - ▶ D. Tamsulosin promotes the passage of distal ureteral stones that are greater than 10 mm in size
- ▶ AFP:Volume 95, Number 2, pp. 123-124, January 15, 2017
- ▶ AFP:Volume 95, Number 9, pp. 552-553, May 1, 2017

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NEPHROLOGY QUIZ 11

- ▶ Renal disease in HIV infected patients is associated with an increased mortality. Risk factors for chronic kidney disease include:
 - ▶ A. Hepatitis C virus co-infection and HIV viremia
 - ▶ B. Injection drug use and CD4 counts less than 200 cells per ml
 - ▶ C. Black race and older age
 - ▶ D. All the above
- ▶ AFP:Volume 96, Number 3, pp. 161-169, August 1, 2017

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NEPHROLOGY QUIZ 12

- ▶ Only 5% to 10% of patients with hypertension are found to have secondary hypertension. Which of the following statements regarding these cases is true?
 - ▶ A. The most common cause in the elderly is renal parenchymal disease
 - ▶ B. It should be considered whenever there is a case of severe and resistant hypertension or in cases where the age of onset is less than 30 years of age
 - ▶ C. Primary hyperaldosteronism is a rare cause of secondary hypertension
 - ▶ D. Coarctation of the aorta occurs more often in males and is usually detected in childhood
- ▶ AFP: Volume 96, Number 7, pp. 453-461, October 1, 2017

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NEPHROLOGY QUIZ

Answer Key

- ▶ 1 C
- ▶ 2 D
- ▶ 3 C
- ▶ 4 B
- ▶ 5 D
- ▶ 6 A
- ▶ 7 A
- ▶ 8 B
- ▶ 9 B
- ▶ 10 D
- ▶ 11 D
- ▶ 12 B

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NEPHROLOGY I

- ▶ Microangiopathic Hemolytic Anemia/ Thrombotic Microangiopathy
 - ▶ Intravascular fragmentation
 - ▶ Schistocytes, ADAMTS13 activity, LFTs, coagulation studies, culture
- ▶ Diseases
 - ▶ TTP: Thrombocytopenia, fever, renal injury, MAHA, neurologic dysfunction
 - ▶ HUS: Children with abdominal pain and diarrhea, followed by MAHA, acute renal injury, thrombocytopenia, neurologic dysfunction
 - ▶ HELLP: Pregnancy related hemolysis, elevated liver enzymes (low lactate dehydrogenase/aspartate transaminase ratio) due to lower rate of hemolysis with more extensive liver involvement
 - ▶ DIC: Prolonged coagulation studies, positive D-dimer test results, decreased fibrinogen levels
 - ▶ Drug-induced TMA: Induced antibodies or direct toxicity from at least 78 drugs forming microthrombi and producing 5% MAHA with similar symptoms

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NEPHROLOGY 4

▶ The DUTY Clinical Decision Rules

- | | |
|---|--|
| ▶ Model 1 (Signs and Symptoms) | ▶ Model 2 (Signs, Symptoms, Dipstick) |
| ▶ Pain/ crying with urination 2 | ▶ All the above plus |
| ▶ Smelly urine (parental report) 2 | ▶ + Leukocytes 2 |
| ▶ Previous UTI 1 | ▶ + Nitrates 3 |
| ▶ Absence of severe cough 2 | ▶ + Blood 1 |
| ▶ Severe illness present 2 | ▶ Score/Diagnosis: 0 to 5= 0.53%, 6 to 8= 7.5%, 9 or more= 51.8% |
| ▶ Score/Diagnosis: 0 to 2= 0.45%, 3 or 4= 1.6%, 5 or more= 9.6% | |

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