



ASCLS Continuing Education

Clinical Lab Investigations: Case Studies for the Lab Professional Case set #18 – Microbiology

Final Quiz

Select the single best answer for each of the following multiple-choice questions and record on the answer sheet.

- Which of the following is *not* one of the symptoms commonly associated with Acute Poststreptococcal Glomerulonephritis?
 - hematuria
 - edema
 - jaundice
 - hypertension
- Which hemolytic pattern would you typically expect to see on a Blood Agar Plate from the microbe responsible for Acute Poststreptococcal Glomerulonephritis?
 - alpha hemolysis
 - beta hemolysis
 - gamma hemolysis
 - double zone hemolysis
- Which strain of *Streptococcus* species is the causative agent of Acute Poststreptococcal Glomerulonephritis?
 - All strains of *Streptococcus* species
 - All strains of Group A *Streptococcus* species
 - All strains of Groups A and B *Streptococcus* species
 - Nephritogenic strains of Group A *Streptococcus* species
- A 5-year-old male patient presents to his physician with nephritic symptoms that are consistent with Acute Poststreptococcal Glomerulonephritis. However, the patient did not present with a recent history of pharyngitis or impetigo caused by *Streptococcus* species. The physician should:
 - Dismiss APSGN as a possible diagnosis
 - Collect a sample and run a Rapid Strep Test
 - Prescribe an antibiotic and follow up with the patient in a few weeks
 - Order laboratory tests such as a BMP, CBC, urinalysis, complement C3 level, and a renal biopsy if necessary

5. The part of the glomeruli most affected by Acute Poststreptococcal Glomerulonephritis is the:
- a) Loop of Henle
 - b) Proximal convoluted tubule
 - c) Glomerular basement membrane
 - d) Peritubular capillary network
6. Which of the following sets of laboratory values is most consistent with Acute Poststreptococcal Glomerulonephritis?
- a) Increased anti-Streptolysin O, decreased complement C3, increased BUN, increased creatinine
 - b) Increased anti-Streptolysin O, decreased complement, decreased BUN, decreased creatinine
 - c) Microcytic anemia, elevated BUN, elevated creatinine, increased reticulocytes
 - d) Increased bilirubin, increased complement C3, increased BUN, increased creatinine
7. In severe cases, complications such as encephalopathy and congestive heart failure may occur. These conditions are most likely a direct result of:
- a) activation of the complement system
 - b) permanent damage to the glomeruli
 - c) prolonged hypertension and hypervolemia
 - d) antibiotic-resistant Streptococcal infections
8. Loop diuretics can be useful in treating Acute Poststreptococcal Glomerulonephritis. They do all of the following, except:
- a) relieve hypertension
 - b) relieve hypervolemia
 - c) remove excess sodium and water
 - d) restore the integrity of the glomerular basement membrane
9. Why is there a 1-2 week latent period between the initial *Streptococcus* pharyngitis infection and the secondary nephritic acute phase?
- a) It takes approximately 1-2 weeks for significant activation of the complement system to occur
 - b) The bacteria lie dormant for approximately 1-2 weeks until they receive signals to reproduce from their environment
 - c) It takes approximately 1-2 weeks for the Streptococcal antibodies to form then deposit in the glomeruli
 - d) It takes approximately 1-2 weeks for the immune system to respond and completely clear the residual Streptococcal infection

10. During the typical course of treatment, patients with Acute Poststreptococcal Glomerulonephritis may be instructed to limit their intake of salt and fluids. Why is this beneficial?
- a) This will prevent recurring infection with Group A *Streptococcus*
 - b) This helps to control hypertension and edema
 - c) This helps patients clear any persisting bacterial infection
 - d) This helps reduce inflammation

Record all answers on the answer sheet. (1) Complete the form below. (2) record your answers. (3) Detach and **mail** your answer sheet with check or money order (**\$15 for ASCLS members, \$25 for non-members**) to:

American Society for Clinical Laboratory Science
1861 International Dr., Suite 200, McLean, VA 22102

ASCLS Continuing Education Answer Sheet
Clinical Lab Investigations: Case set #18 – Microbiology
carries **1.0 hours** of continuing education. This form must be received by
August 31, 2017 to receive credit



Multiple Choice Questions

Circle the single best answer for each question

1. A B C D
2. A B C D
3. A B C D
4. A B C D
5. A B C D
6. A B C D
7. A B C D
8. A B C D
9. A B C D
10. A B C D

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