

Case Study Lab Report for Labs 14: The Streptococci and Enterococci

A. Case Study #1 from Lab 14: Unknown #1

Each member of the group must:

- 1. Print a copy of each of the two rubrics from the links above.***
- 2. Print and fill out a copy of the Team Member Evaluation Form from the link above.***
- 3. Staple them together and hand them in to me the day your Lab 14 Case Study Lab Report is due.***

Your Name:

Others in your group:

Lab section:

Date:

A 21 year old male complains of a sore throat and painful swallowing. A physical exam of the throat shows tonsillopharyngeal edema and erythema, a patchy exudate, petechiae on the soft palate, and a red, swollen uvula. He has a temperature of 101.6 °F. He doesn't have a cough or a noticeably runny nose.

1. Patient's signs and symptoms

Read the case study. Explain how the patient's signs and symptoms contributed to your diagnosis of the type of infectious disease seen here. You are urged to use the computers in lab to search reliable Internet sources to support this. Reliable sources you might consider are *Medscape* (http://emedicine.medscape.com/infectious_diseases) and the Centers for Disease Control and Prevention (CDC) at <http://www.cdc.gov/>. Cite any sources you use at the end of this Patient's History section in APA style (<http://www.apastyle.org/>).

The patient's signs and symptoms should suggest a general type of infectious disease that is present, such as a urinary tract infection, a wound infection, gastroenteritis, pharyngitis, pneumonia, septicemia, etc. You need to determine the general type of infection in order to determine what microbiological tests to perform to identify the bacterium causing the infection. Search at least one medically-oriented reference article from a reliable site such as Medscape and **use this article to support your diagnosis of the type of infectious disease seen here.** Don't forget to **cite any sources you used in APA style** directly under this Patient's Signs and Symptoms sections of this Lab Report.

2. Vocabulary list for medical terms used in the case study under signs and symptoms

List and define any medical terms used in your case study that describe the patients's signs and symptoms that the average person not in the medical profession might not know.

3. Microbiological lab tests you performed in Lab 14

a. Blood agar with Taxo A® (bacitracin) disc: Unknown #1

Give the results of the Blood agar with Taxo A® (bacitracin) disc you performed on the unknown you were given, and how you reached this conclusion. **State how this contributed to your final diagnosis as to whether or not the person has streptococcal pharyngitis.** The possible results for blood agar and Taxo A® disc were discussed in the beginning pages of this lab.

4. If he has streptococcal pharyngitis, state the genus and species of this bacterium.

B. Case Study #1 from Lab 14: Unknown #2

Each member of the group must:

- 1. Print a copy of each of the two rubrics from the links above.***
- 2. Print and fill out a copy of the Team Member Evaluation Form from the link above.***
- 3. Staple them together and hand them in to me the day your Lab 14 Case Study Lab Report is due.***

Your Name:

Others in your group:

Lab section:

Date:

A 21 year old male complains of a sore throat and painful swallowing. A physical exam of the throat shows tonsillopharyngeal edema and erythema, a patchy exudate, petechiae on the soft palate, and a red, swollen uvula. He has a temperature of 101.6 °F. He doesn't have a cough or a noticeably runny nose.

1. Patient's signs and symptoms

Read the case study. Explain how the patient's signs and symptoms contributed to your diagnosis of the type of infectious disease seen here. You are urged to use the computers in lab to search reliable Internet sources to support this. Reliable sources you might consider are *Medscape* (http://emedicine.medscape.com/infectious_diseases) and the Centers for Disease Control and Prevention (CDC) at <http://www.cdc.gov/>. Cite any sources you use at the end of this Patient's History section in APA style (<http://www.apastyle.org/>).

The **patient's history and patient's symptoms should suggest a general type of infection**, such as a urinary tract infection, a wound infection, gastroenteritis, strep throat, pneumonia, septicemia, etc. Search at least one medically-oriented reference article from a reliable site such as *Medscape* and **use this article to support your diagnosis of the type of infection**. Don't forget to **cite any sources you used in APA style under the Patient's History and Patient's Symptoms sections** of your Lab Report.

2. Vocabulary list for medical terms used in the case study under signs and symptoms

List and define any medical terms used in your case study that describe the patients's signs and symptoms that the average person not in the medical profession might not know.

3. Microbiological lab tests you performed in Lab 14

a. Blood agar with Taxo A® (bacitracin) disc: Unknown #1

Give the results of the Blood agar with Taxo A® (bacitracin) disc you performed on the unknown you were given, and how you reached this conclusion. **State how this contributed to your final diagnosis as to whether or not the person has streptococcal pharyngitis.** The possible results for blood agar and Taxo A® disc were discussed in the beginning pages of this lab.

4. If he has streptococcal pharyngitis, state the genus and species of this bacterium.

C. Case Study #2

Each member of the group must:

- 1. Print a copy of each of the two rubrics from the links above.***
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Your Name:

Others in your group:

Lab section:

Date:

A 57 year old diabetic male hospitalized following hip replacement surgery has had an indwelling urinary catheter inserted for 8 days. He presents with suprapubic discomfort. His blood pressure is normal and he does not have fever, chills, or flank pain. There is no costovertebral angle (CVA) tenderness. A complete blood count (CBC) shows leukocytosis with a left shift. A urine dipstick shows a positive leukocyte esterase test, a negative nitrite test, 30mg of protein per deciliter, and red blood cells in the urine. Microscopic examination of centrifuged urine shows 50 white blood cells, as well as 20 bacteria and 5 red blood cells per high-power field.

1. Patient's history and predisposing factors

Read the case study. Explain how any relevant parts of the patient's history contributed to your diagnosis of the type of infectious disease seen here. You are urged to use the computers in lab to search reliable medically oriented Internet sources to support this. Reliable sources you might consider are Medscape (http://emedicine.medscape.com/infectious_diseases) and The Centers for Disease Control and Prevention (CDC) at <http://www.cdc.gov/>. Cite any sources you use at the end of this Patient's History section in APA style (<http://www.apastyle.org/>).

The **patient's history should suggest a general type of infectious disease** that is present, such as a urinary tract infection, a wound infection, gastroenteritis, pharyngitis, pneumonia, septicemia, etc. **Do not look up the bacterium you eventually identify** as the cause of this infectious disease. You don't know the causative bacterium at this point. **You need to determine the general type of infection to determine what microbiological tests to perform in order to identify the bacterium causing the infection.** Search at least one medically-oriented reference article from a reliable site such as *Medscape* and **use this article to support your diagnosis the type of infectious disease seen here.** Don't forget to **cite any sources you used in APA style directly under this Patient's History and Patient's Symptoms sections** of this Lab Report.

2. Patient's signs and symptoms

Read the case study. Explain how the patient's signs and symptoms contributed to your diagnosis of the type of infectious disease seen here. You are urged to use the computers in lab to search reliable Internet sources to support this. Reliable sources you might consider are *Medscape* (http://emedicine.medscape.com/infectious_diseases) and the Centers for Disease Control and Prevention (CDC) at <http://www.cdc.gov/>. Cite any sources you use at the end of this Patient's History section in APA style (<http://www.apastyle.org/>).

The **patient's signs and symptoms should suggest a general type of infectious disease** that is present, such as a urinary tract infection, a wound infection, gastroenteritis, strep throat, pneumonia, septicemia, etc. **Do not look up the bacterium you eventually identify** as the cause of this infectious disease. You don't know the causative bacterium at this point. **You need to determine the general type of infectious disease present in order to determine what microbiological tests to perform to identify the bacterium causing the infection.** Search at least one medically-oriented reference article from a reliable site such as *Medscape* and **use this article to support your diagnosis the type of infectious disease seen here.** Don't forget to **cite any sources you used in APA style under this Patient's History and Patient's Symptoms sections** of this Lab Report.

3. Vocabulary list for medical terms used in the case study under signs and symptoms

List and define any medical terms used in your case study that describe the patients's signs and symptoms that the average person not in the medical profession might not know.

4. Results of laboratory test given in the case study

List each lab test given and explain how the results of that test helps to contribute to your diagnosis. **The CBC and urinalysis tests are described in [Appendix C](#) and [Appendix D](#) of this lab manual.**

5. Microbiological lab tests you performed in Lab 14

a. Gram stain and catalase test results

Give the Gram reaction (Gram-positive or Gram-negative and how you reached this conclusion) and the shape and arrangement of the unknown you were given. Because Enterococci and Staphylococci can sometimes look similar in Gram stains done from a plate culture, perform a catalase test on your unknown to help differentiate an *Enterococcus* from a *Staphylococcus*. **State how this contributed to your decision as to which microbiological tests and/or media to use next.** The Gram stain is discussed in Lab 6; the catalase test in Lab 8.

b. Bile Esculin Azide agar

Give the results of the Bile Esculin Azide agar slant you inoculated with the unknown you were given, and how you reached those conclusions. **State how this contributed to your final diagnosis of the bacterium causing this infection.** The possible results for Bile Esculin Azide agar were discussed earlier in this lab.

Genus of the bacterium: _____

Infection: _____