

Case Study Lab Report for Labs 15: The Staphylococci

A. Case Study from Lab 15: Unknown #1

You must print a copy of the rubric for your case study from the link in the on-line lab manual and staple them to your Lab 15 Lab Report before you submit the report to your instructor!

Your Name:

Others in your group:

Lab section:

Date:

A 57 year old female who is diabetic, a smoker, and who 30 days ago had hip replacement surgery presents with pain and signs of inflammation at the surgical site. Examination shows she has a fever of 101 °F and an increased total white blood cell count with a left shift. Radiologic examination shows a deep pelvic abscess. A culture of the implant site was taken.

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 symptoms

Read the case study. Explain how the patient's 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. 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 test is described in [Appendix C](#) of this lab manual.

4. Microbiological lab tests you performed in Lab 15

a. Gram stain

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. **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.

b. Blood agar with novobiocin (NB) disc

Give the results of the Blood agar with Taxo NB disc you performed on the unknown you were given, and how you reached this conclusion. **State how this contributed to your decision as to what bacterium is causing the infection.** The possible results for Blood agar and NB disc were discussed in the beginning pages of this lab.

c. Mannitol Salt agar

Give the results of the Mannitol Salt agar you performed on the unknown you were given, and how you reached this conclusion. **State how this contributed to your your decision as to what bacterium is causing the infection.** The possible results for Mannitol Salt agar were discussed in the beginning pages of this lab.

d. DNase agar

Flood the surface of your DNase agar plate with 1N HCl. Give the results of the DNase agar you performed on the unknown you were given, and how you reached this conclusion. **State how this contributed to your your decision as to what bacterium is causing the infection.** The possible results for DNase agar were discussed in the beginning pages of this lab.

e. Coagulase test

Give the results of the Coagulase test you performed on the unknown you were given, and how you reached this conclusion. **State how this contributed to your decision as to what bacterium is causing the infection.** The possible results for the Coagulase test were discussed in the beginning pages of this lab.

Final Diagnosis

Genus and species of unknown #1 = _____

Infection: _____

B. Case Study from Lab 15: Unknown #2

You must print a copy of the rubric for your case study from the link in the on-line lab manual and staple them to your Lab 15 Lab Report before you submit the report to your instructor!

Your Name:

Others in your group:

Lab section:

Date:

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1. Patient's history

Read the case study. Explain how any relevant parts of the patient's history contributed to your diagnosis. 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 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. Patient's symptoms

Read the case study. Explain how the patient's symptoms contributed to your diagnosis. 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.

3. 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 final diagnosis. The CBC test is described in [Appendix C](#) of this lab manual.

4. Microbiological lab tests you performed in Lab 15

a. Gram stain

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. **State how this contributed to your diagnosis and choice of microbiological tests and/or media to perform next.** The Gram stain is discussed in Lab 6.

b. Blood agar with novobiocin (NB) disc

Give the results of the Blood agar with Taxo NB disc you performed on the unknown you were given, and how you reached this conclusion. **State how this contributed to your final diagnosis.** The possible results for Blood agar and NB disc were discussed in the beginning pages of this lab.

c. Mannitol Salt agar

Give the results of the Mannitol Salt agar you performed on the unknown you were given, and how you reached this conclusion. **State how this contributed to your final diagnosis.** The possible results for Mannitol Salt agar were discussed in the beginning pages of this lab.

d. DNase agar

Flood the surface of your DNase agar plate with 1N HCl. Give the results of the DNase agar you performed on the unknown you were given, and how you reached this conclusion. **State how this contributed to your final diagnosis.** The possible results for DNase agar were discussed in the beginning pages of this lab.

e. Coagulase test

Give the results of the Coagulase test you performed on the unknown you were given, and how you reached this conclusion. **State how this contributed to your final diagnosis.** The possible results for the Coagulase test were discussed in the beginning pages of this lab.

Final Diagnosis

Genus and species of unknown #2 = _____

Infection: _____