

Microbiology case studies assignment



**ASSIGN
BUSTER**

What condition did this patient have? She had a Group A Streptococcal infection- to be more specific since the bacteria was a gram positive coccus that grows in chains it was caused by Streptococcus pyogenes. The symptoms she had that matched were discovered skin, swelling, hot sensation, and pain. With group a streptococcal infection amputation may sometimes be needed. It was a flesh eating disease called Erysipeloid. 2. What features suggest that it is not Colostomies offering gangrene?

Colostomies fringed is a gram + rod and the bacteria they found in the patient was a gram + coccus which eliminates colostomies preferring as a possibility even though some of the symptoms matched gangrene infections.

3. Why was amputation the best solution for the infection in this case? Since the wound infection grew so rapidly, amputation would be the best because death could result if the infection grew any bigger or started to spread through the blood. 4. How is the bacterium transmitted?

The test came back a gram negative which is what Bordetella pertussis is. The symptoms are coughing, fatigue, mild fever, mucus, and low oxygen levels. Since whooping cough has 3 different stages she was in the late stage. Every one in her family has been coughing also. I also thought it may have been tuberculosis but I think the gram negative really made the deciding factor. I also looked up the two disease symptoms on Monoclinic.com and whooping cough seems to fit that best. B What is the causal agent? Bordetella pertussis.

What prevention methods can be used for this disease? There are vaccinations for the disease and they even have booster shots for babies. If you have the disease wear a mask in public so it doesn't spread. If a person is affected they can be given erythrocytes to treat themselves and not spread the disease. D.

How did the infant contract this disease? Since her family had been coughing for weeks they spread their germs through air droplets and just by her being around them she caught it especially since it is very contagious.