Editors

Bacteremia is a bacterial infection of the bloodstream. When bacteria enter the bloodstream, it is known as bacteremia. Several bacteria can be found on the skin's surface or in the moist linings of the urinary system, lower digestive system, and other interior surfaces. Bacteremia is when there is bacteria in the blood. Bacteremia happens when germs from infections in your body travel to your blood. It can also be caused by a catheter or drain that is inserted into the body and left in place. Bacteremia occurs when bacteria are found in your circulation. You may have heard bacteremia referred to as “blood poisoning,” but this is not a medical word. Bacteremia can be asymptomatic in some circumstances, meaning it causes no symptoms. Symptoms may be present in other cases, and there is a danger of serious complications. You may have heard of bacteremia being associated with conditions like septicemia and sepsis. These terms are all closely related, but have slightly different meanings.

Strictly speaking, bacteremia refers to the presence of bacteria in the bloodstream. Bacteria can sometimes enter your bloodstream due to things like cleaning your teeth or undergoing a minor medical procedure.

In many healthy people, bacteremia will clear up on its own without causing illness. However, when an infection is established within the bloodstream, this type of bacteremia is differentiated as septicemia. If left untreated, a bloodstream infection can lead to more serious complications. One of these is sepsis, which is caused by a strong immune response to the infection. Sepsis and septic shock can lead to organ failure and even death. A new study suggests that treating gram-negative bacteremia for seven days is equally effective as 14 days of treatment, if resolution of sepsis and source control are both present.

Causes

Bacteremia can be caused by a variety of microorganisms. Some of these bacteria can enter the bloodstream and cause illness.

Examples of such bacteria include:

- *Staphylococcus aureus*, including MRSA
- *Escherichia coli* (E. coli)
- *Pneumococcal bacteria*
- Group A Streptococcus
- *Salmonella species*
- *Pseudomonas aeruginosa*

Bacteremia can be caused in a variety of ways, including by undergoing a dental procedure such as a normal teeth cleaning or a tooth extraction as a result of a surgery or operation an infection that has migrated to the bloodstream from another section of the body through medical equipment, such as indwelling catheters and breathing tubes as a result of serious injuries or burns.

Fever or chills that shiver Weakness or vertigo Confusion, for example, is a sign of a change in mental state. Most of the body is covered in a rash, purple patches, or redness. Children's irritability or malnutrition. Other signs and symptoms of infection include nausea and vomiting, discomfort, and difficulty breathing.

The transmission of infection diseases

Minor injuries which may cause bacteria from the skin’s surface to enter the bloodstream,

Infected wounds

When drugs may be injected into the body using a needle which is not sterilized

When a bladder catheter or intravenous may be inserted into the body

Dental procedures

Antibiotics must be used first away to treat a bloodstream infection. This may aid in the prevention of problems such as sepsis. During your treatment, you will be admitted to the hospital. If germs are found in your blood, you'll most likely be given broad-spectrum antibiotics via IV. This is a broad-spectrum antibiotic regimen that should work against a wide range of microorganisms. The type of bacteria causing your infection can be identified at this period, and antibiotic sensitivity testing can be conducted. Your doctor may change your medications based on these findings to be more tailored to the infection's cause. The period of treatment is determined on the infection's source and severity. Antibiotics may be required for 1 to 2 weeks. During treatment, IV fluids and other drugs may be administered to assist stabilise your condition.

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