IMMUNOLOGY – ESSAY

Toxic Shock Syndrome

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Toxic Shock Syndrome (TSS)

Staphylococcus aureus is a type of Staphylococcus family, which lives in a form of group. These gram-positive bacteria can cause multiple diseases directly, such as skin infections or by producing toxins, responsible for food poisoning and toxic shock syndrome.

Toxic shock syndrome (TSS) is a **systemic illness**, which means that it affects the whole body. It can be caused by one of two different types of bacteria, Staphylococcus aureus and Streptococcus pyogenes — although toxic shock that is caused by the Streptococcus bacteria is rarer. These bacteria can produce toxins. In some people whose bodies can't fight these toxins, the immune system reacts. Any body can get TSS men, women and children. This reaction causes the symptoms associated with TSS.
Symptoms of TSS occur suddenly. Because it's an illness that is caused by a toxin, many of the body's organ systems are affected. The signs and symptoms of TSS include:

- high fever (greater than 102° Fahrenheit [38.8° Celsius])
- rapid drop in blood pressure (with lightheadedness or fainting)
- sunburn-like rash on the entire body
- vomiting and diarrhea
- severe muscle aches or weakness
- bright red coloring of the eyes, throat, and vagina
- headache, confusion, disorientation, or seizures
- kidney and other organ failure

The average time before symptoms appear for TSS is 2 to 3 days after an infection with *Staphylococcus* or *Streptococcus*, although this can vary depending on the cause of the infection.

Possible causes of streptococcal and staphylococcal TSS may include the following:
- a history of using super-absorbent tampons
- surgical wounds
- a local infection in the skin or deep tissue
- history of using a diaphragm or contraceptive sponge
- history of childbirth or abortion left in vagina and Wound infection

Treatment for TSS depends on the severity of the case. In all suspected cases, caution should be exercised since the illness may progress from mild to life-threatening within a matter of hours. If an abscess is present or a tampon in place, it should be removed.

Antibiotics are used to treat the infection. Most patients recover within 7 to 14 days. Some cases require hospitalization and may even require treatment in intensive care facilities.

Shock is treated by the administration of intravenous fluids, which helps the body maintain steady blood pressure. When toxic shock stems from a localized infection, such as an abscess or cellulitis, surgery is indicated to drain the abscess or debride devitalized tissues.

Recurrences are common among those women who developed the syndrome during menstruation. Since it is difficult to completely eradicate the staphylococcus organism from the vagina, up to one-third of these patients have a recurrence of the illness within six months. These recurrences have most frequently occurred during a menstrual period. For this reason, women who have had TSS are advised not to use tampons for several months following the illness. The recurrent illness is usually not as severe as the initial episode.
The following may help prevent TSS:

- Menstruating girls and women should avoid using tampons if they have had TSS, as reinfection is common.
- Prompt and thorough wound care is crucial in avoiding TSS.
- Minimal usage of vaginal foreign body items such as diaphragms, tampons, or sponges helps to reduce the risk of TSS

Reference:

Center for Disease Control and prevention - TSS United State 1999 - 2000

www.Healthyplace.com

www.Mama’shealth.com

www.Americandictionary.com