

# Toxic Shock Syndrome (TSS)

Toxic Shock Syndrome (TSS) is a very rare but potentially serious illness that can affect males or females at any age, but is more common during adolescence. It is caused by particular strains of bacteria called *Staphylococcus aureus* (and less commonly *Streptococcus pyogenes*), which are able to produce a toxin. These bacteria are normally found on the skin, in the nose, armpit, groin or vagina of one in every three people, where they usually live without causing any health problems. In rare cases, the bacteria produce a toxin which can cause toxic shock syndrome in some individuals.

The symptoms of toxic shock syndrome are caused by the effect of the toxin on the body, rather than the bacterial infection itself.

Symptoms include:

- > a sudden onset of high fever
- > vomiting
- > diarrhoea
- > dizziness (from low blood pressure)
- > muscle aches
- > confusion and collapse
- > a sunburn-like rash present at the time of illness, followed by peeling of the skin on the palms and soles one to two weeks later.

Toxic shock syndrome is diagnosed by clinical examination. Sometimes bacteria producing toxin can be grown from the patient.

The majority of cases of TSS occur in women during menstruation, mostly associated with tampon use. There is no evidence that tampons directly cause TSS – the bacteria *Staphylococcus aureus* are the cause of the illness – not the tampon. This explains why women using pads, men and children can get TSS. However, women who use tampons during their period have a higher risk of TSS than women who do not. Cases have also followed surgery. In more than 30% of cases, no obvious bacterial infection can be found.

## Incubation period

*(time between becoming infected and developing symptoms)*

Uncertain, probably varies from case to case.

## Infectious period

*(time during which an infected person can infect others)*

Direct person-to-person spread does not occur.

## Treatment

Antibiotics are given. If severely ill, patients may need to be supported in the intensive care unit in a hospital.

## Prevention

- > If high fever, vomiting or diarrhoea develops during menstruation, stop using tampons and seek medical advice immediately. It may not be TSS but this must be verified because TSS can be dangerous if not treated in its early stages.
- > The risk of TSS may be reduced by using tampons intermittently during menstruation. Overnight, it is preferable to use a pad.
- > Take special care with personal hygiene during menstruation. Bathe or shower daily.
- > Wash your hands before as well as after inserting a tampon. Unwrap a fresh, clean tampon just before insertion and do not handle it more than is necessary. Discard any tampons you may have unwrapped and not used immediately. Insert the tampon gently and carefully.
- > Use the lowest absorbency tampon necessary.
- > Change the tampon as directed by the manufacturer's instructions.
- > Never insert more than one tampon at a time.
- > Remove tampons at the end of a period.

Women who have had an episode of toxic shock syndrome are at increased risk of a second episode. Therefore a doctor may advise against tampon use in women who have had TSS.