



Toxic Shock Syndrome (TSS) Risks

DEFINITION	Toxic shock syndrome (TSS) is a rare but potentially fatal disease that, when related to menstruation occurs most frequently in young women aged 15 to 24, usually in association with tampons but can include other intravaginal menstrual product use. It can occur in children, men, and women. Non-menstrual toxic shock can be associated with vaginal contraception, and postoperative wounds. TSS is caused by the production of toxins from bacteria, most commonly staphylococcus aureus, which infects the blood stream and results in a systemic reaction. It may be fatal in 50% of cases.
SUBJECTIVE	May include: <ol style="list-style-type: none">1. LMP2. Prolonged use of intravaginal menstrual products including tampons with menses or mid-cycle bleeding3. Prolonged use of vaginal contraception4. Use of vaginal contraceptive devices for menstrual protection5. Use of vaginal insertion devices for urinary incontinence6. Complaints of dizziness, weakness, chills or malaise7. Sudden onset of fever (over 102°F)8. Nausea, vomiting or diarrhea9. Muscular aches and pains10. Headaches, light-headedness, fainting, confusion or hypotension11. Sore throat12. Bloodshot eyes13. Skin rash (sunburn-like), red palms and soles or peeling of the skin on the palms and soles14. Recent childbirth
OBJECTIVE	May include: <ol style="list-style-type: none">1. Forgotten tampon/device upon examination2. Remnants of tampon, sponge or latex found in vagina upon examination3. Pelvic exam may reveal erythema of vaginal mucosa or vaginal ulcerations4. Elevated temperature (>38.9°C/102°F), diarrhea, headache, nausea/vomiting or seizures5. Hemodynamic signs associated with shock, including decreased blood pressure and increased pulse and respiration6. Generalized erythema rash and skin desquamation (looks like sunburn)> This is especially noticeable on the trunk, neck, palms of hands and soles of feet. Skin peeling usually occurs 1-2 weeks after the rash appears7. Client may appear disoriented or confused
LABORATORY	<ol style="list-style-type: none">1. No specific test is available to confirm a TSS diagnosis.2. Vaginitis cervicitis screening, as appropriate.
ASSESSMENT	Toxic Shock Risks or suspected Toxic Shock Syndrome (TSS)
PLAN	<ol style="list-style-type: none">1. Remove tampon or other vaginal foreign body2. Immediate consultation with a physician is warranted for suspect of TSS and explain to the client the need for immediate hospitalization.3. Client education should be aimed at prevention or lowering the risks of TSS
CLIENT EDUCATION	<ol style="list-style-type: none">1. Educate all clients that the risk of TSS can be greatly reduced by following the recommended tampon guidelines. (The FDA requires manufacturers to give information about TSS and absorbency on the box or in package insert.)<ol style="list-style-type: none">a. Avoid super absorbent tampons; use the lowest absorbency tampon.b. Alternate the use of tampons with menstrual pads.



	<ul style="list-style-type: none">c. Change tampons and pads, at least every 6-8 hours. Avoid leaving a tampon inserted overnight.d. With insertion, use clean hands and take care not to scratch the vagina. Use water soluble lubricating jelly if vagina is dry.e. Do not use tampons between periods.f. Always remove last tampon at end of your period.g. Never use tampons, if have had TSS in the past. <ul style="list-style-type: none">2. Teach all clients the danger signals of toxic shock and advise removal of tampon and get medical help right away if having the following symptoms during menstruation.<ul style="list-style-type: none">a. Sudden high fever.b. Vomiting.c. Diarrhea.d. Muscular aches.e. Dizziness, fainting, or near fainting when standing up.f. A rash that looks like a sunburn.3. Review safer sex education, as appropriate.4. Recommend client RTC annually and PRN for problems.
CONSULT/ REFER TO PHYSICIAN	<ul style="list-style-type: none">1. Any client with suspected TSS.

References:

1. Hatcher RA, Trussell J, Nelson A, Cates W, Kowal D, Policar M. Contraceptive Technology. 20 edition. Atlanta GA: Ardent Media, Inc., 2015. Pp 240, 372 383, 387-389, 810-813.
2. Toxic shock syndrome: MedlinePlus Medical Encyclopedia