Washington State Department of Health

Tetanus (lockjaw)

<table>
<tr><td>Signs and Symptoms</td><td colspan="2">Three clinical forms: generalized, localized, and cephalic tetanus.
• <u>Generalized:</u> Most common presentation. Descending pattern, trismus (painful contractions of the masseter muscle), stiffness of the neck, difficulty in swallowing, rigidity of abdominal muscles. Spasms induced by sensory stimuli. Opisthotonos (spine and extremities are bent with convexity forward, the body resting on the head and the heels), seizures, fever, sweating, hypertension, and tachycardia may also occur.
• <u>Localized:</u> Uncommon. Persistent contraction of muscles in the same anatomic region where injury and spore inoculation occurred. May resolve spontaneously but more commonly represents a prodrome of generalized tetanus.
• <u>Cephalic:</u> Rare. Dysfunction of cranial nerves, associated with head and neck wounds. Can precede generalized tetanus.
Neonatal tetanus: Very rare in the United States. Infant usually presents with generalized weakness and failure to nurse that progress to rigidity and spasms. Mortality rate exceeds 90%. Apnea and sepsis are the leading causes of death.</td></tr>
<tr><td>Incubation</td><td colspan="2">Varies from 3-21 days, average 8 days</td></tr>
<tr><td rowspan="2">Case classification</td><td colspan="2">Clinical definition: Acute onset of hypertonia and/or painful muscular contractions (usually of the muscles of the jaw and neck) and generalized muscle spasms without other apparent medical cause.</td></tr>
<tr><td>Confirmed case:
There is no definition for “confirmed” tetanus.</td><td>Probable case:
In the absence of a more likely diagnosis, an acute illness with
• Muscle spasms or hypertonia, and
• Diagnosis of tetanus by a health care provider
OR
Death, with tetanus listed on the death certificate as the cause of death or a significant condition contributing to death</td></tr>
<tr><td>Differential diagnosis</td><td colspan="2">Strychnine poisoning is the only condition that truly mimics generalized tetanus.
Other conditions can present with some clinical features common to tetanus including: dental infections, malignant hyperthermia, stimulants use, atropine poisoning, hypocalcemia, phenothiazine reaction, acute abdomen, and meningitis.</td></tr>
<tr><td>Treatment</td><td colspan="2">Tetanus immunoglobulin (TIG) can help neutralize unbound tetanus toxin.
Intravenous immunoglobulin (IVIG) can be used if TIG not available.
Supportive care and pharmacotherapy are used to control spasms and manage pain.
Additional treatment includes wound care and debridement, antibiotics administration, and tetanus vaccine. Tetanus disease does not reliably result in immunity.</td></tr>
<tr><td>Laboratory</td><td colspan="2">Diagnosis is clinical as there are no reliable laboratory tests for confirming tetanus.</td></tr>
<tr><td>Public Health investigation</td><td colspan="2">• Assess the likelihood of tetanus: confirm compatible clinical symptoms, verify vaccination and travel history, and assess exposure risk (e.g. recent injury, gardening, or injection drug use.)
• Tetanus is not communicable from person to person.
• Outbreaks (same source of infection, e.g. contaminated heroin) are extremely rare. Collect exposure details, demographics, and onset date of any person reported to have a similar illness.
• Hospitalized patients should be cared for using standard precautions.
• If tetanus immunization not up to date at the time of presentation, a dose should be given. Complete series later, according to the recommended immunization schedule for patient’s age.
• Environmental evaluation is not indicated.</td></tr>
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