The Importance of Tetanus Awareness

Tetanus is a disease caused by an infection from the spores of the bacterium Clostridium tetani entering a cut or wound, with most cases occurring within 14 days. When tetanus develops during pregnancy or within six weeks after pregnancy, it is referred to as maternal tetanus. On the other hand, tetanus that occurs within the first 28 days of a newborn's life is known as neonatal tetanus.

In 2018, approximately 25,000 newborns died from neonatal tetanus, representing a significant decline from 1988 due to enhanced vaccination initiatives. By 2023, 84% of infants worldwide had received three doses of the diphtheria-tetanus-pertussis (DTP) vaccine, a significant increase from the 1988 figure.

Symptoms

The appearance of signs and symptoms of tetanus occurs anytime from 3 to 21 days after the infection from tetanus bacteria has been sustained through a wound. These symptoms indicate an intensified body's response to the infection. If left untreated, they can lead to further complications.

Common symptoms may involve:

- Cramping in the jaw or difficulty opening the mouth
- Muscle spasms in areas like the back, abdomen, or limbs
- Sudden, painful spasms triggered by unexpected sounds
- Difficulty swallowing
- Seizures
- Headaches
- Fever accompanied by sweating
- Rapid heart rate or fluctuations in blood pressure

Tetanus can lead to a range of serious complications, including vocal cord spasms, which may interfere with breathing, and broken bones caused by severe muscle spasms. Breathing problems

and pneumonia are also common, as the disease can compromise the respiratory system. Additionally, tetanus may cause high blood pressure, abnormal heart rhythms, or even life-threatening conditions such as a blood clot in the lung (pulmonary embolism). In severe cases, these complications can result in death if timely medical intervention is not provided.

Prevention

The majority of cases of tetanus occur among newborns and mothers who have not received the requisite vaccinations. Tetanus can be prevented through vaccination with tetanus toxoid-containing vaccines (TTCV). Tetanus vaccines are derived from inactivated tetanus toxin, which is produced by cultivating toxigenic strains of Clostridium tetani in liquid media. Tetanus toxoid vaccines are available in various formulations, including as a single-antigen vaccine (TT), combined with diphtheria toxoid in infant and adult doses (DT and Td), or with diphtheria and whole-cell or acellular pertussis (DTP).

Source:

World Health Organization. Tetanus

World Health Organization. Tetanus. 2024

John Hopkins Medicine. Tetanus