Scarlet Fever in Human: A Brief Overview

Ganguly S1* and Wakchaure R2

1Department of Veterinary Microbiology, Arawali Veterinary College, Jaipur Road, V.P.O. Bajor, Sikar, Rajasthan, India
2Department of Animal Genetics & Breeding, Arawali Veterinary College, Jaipur Road, V.P.O. Bajor, Sikar, Rajasthan, India

*Corresponding author: Ganguly S, Arawali Veterinary College, Jaipur Road, V.P.O. Bajor, Sikar, Rajasthan, India, Tel: 9231812539; E-mail: ganguly38@gmail.com

Received date: Sep 23, 2016; Accepted date: Sep 24, 2016; Published date: Sep 28, 2016

Copyright: © 2016 Ganguly S, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.


Abstract

Scarlet fever is a disease occurring in human beings due to group A Streptococcus (group A strep) infection. The signs and symptoms include a fever, sore throat, lymphadenopathy, sore throat and a characteristic rash. Children between 5 to 15 years age are most susceptible to this infection.

Keywords: Human, Scarlet fever, Streptococcus

Introduction

The characteristic skin rash in septic sore throat results due to the erythrogenic toxin produced by the bacterium. Confirmatory diagnosis can be done by culturing the causative bacteria from throat. Effective vaccines are not available against scarlet fever. Renal problems, rheumatic cardiac problems and arthritis are the associated symptoms of this disease [1].

Signs and symptoms

Sore throat, fever, bright red tongue resembling strawberry appearance and a characteristic red skin rash especially around the under arms and elbow are the predominant features of the disease [2].

Susceptible host

Generally, children of 5-15 years age are mostly affected. The scarlet fever occurring after a throat infection usually subsides within 3-5 days [3].

Transmission

Transmission takes place through aerosols, fomites and dust and contact transmission takes place through skin comin in direct contact to dust.

Diagnosis

Clinical diagnosis is made by seeing the signs and symptoms. Complete blood count detecting eosinophilia, neutrophilia, increased erythrocyte sedimentation rate and C-reactive protein are the confirmatory features.

Differential diagnosis should be made from Far-East scarlet like fever, Kawasaki disease and Yersinia pseudotuberculosis infection [4].

Dick test

In 1924, the Dick test was invented which is used for the identification of patients suffering from scarlet fever. In this test, the broth culture filtrate from an erythrogenic toxin-producing group A streptococcus is injected intracutaneously into susceptible persons. Edematous and erythematous skin reactions develop after 24 h of injection in susceptible patients. Neutralization of the toxin occurs after the second injection at the same site in reactive patients [5].

References