

The Anthrax Outbreak

Anthrax is a zoonotic disease- a disease of animal transmissible secondarily to human being.. Human to human transmission of Anthrax is very rare because of the fact that the vegetative form of the bacteria present in the diseased man or animal can not cause the disease. The Bacteria *Bacillus Anthracis* is a spore forming organism. It is the spore present in the soil is the only infective form. Cutaneous anthrax is the most common form and it occurs by contact with infected animal, raw meat or by contact with animal during the process of slaughtering or during preparation of cooking of meat from infected animal.

Anthrax exists in animals and human beings in many countries of Asia and Africa including Bangladesh. Institute of Epidemiological Disease Control and research (IEDCR) detected 13 small scale outbreaks since 2009.

The recent outbreak was first detected in the district of Sirajganj in the month of August and then the disease spread to 12 other districts. It infected 607 persons so far and all of them had cutaneous Anthrax. All the infected persons got cured and outbreak of anthrax has been effectively controlled by the combined effort of the IEDCR, Health and Livestock Directorate of GOB. No new case has been reported since 8 October 2010.

Anthrax is not at all a life threatening disease. Cutaneous anthrax can be effectively treated by administering simple antibiotics like Ciprofloxacin or Doxycyclin for 7-10 days. Ingestion of meat does not usually cause anthrax. Inhalation has got some historical importance. That is the reason why anthrax outbreak has caused wide scale panic among general population. Consequently consumption of meat fell down remarkably. The anthrax panic dates

from bio-terrorism attack in USA in 2001 in which 24 people were infected by anthrax bacillus. This deadly infection was caused by exposure to *Bacillus Anthracis* in a powder that had been sent through the mail. Out of them 11 suffered from Inhalation Anthrax and the rest had Cutaneous Anthrax. Among the inhalation anthrax cases 5 persons died while the rest were totally cured. On April 2, 1979, there was an unusual anthrax outbreak which affected 94 people and killed at least 64 of them in the Soviet city of Sverdlovsk. The outbreak was caused by an accidental release of anthrax spores from a suspected Soviet biological weapons facility

There is no chance of Inhalation Anthrax in our country since this form of disease is generally caused by bio-terrorism attack or rarely from industrial exposure.

The recent outbreak of anthrax is of cutaneous variety and is treatable with simple antibiotic. The anthrax outbreak can occur at any time and is dependent on environmental and climatic factors. There is no reason to be panicking as the disease itself is not life threatening but to be aware. However, the Health and Animal Husbandry Directorate could jointly undertake an initiative for building awareness about its cause, how it spreads and its likely impact upon human health among the people at large.

M. A. Jalil Chowdhury¹, Sharmin Ahmed²

¹Professor, ²FCPS Student, Department of Medicine, BSMMU