

Crimean-Congo Haemorrhagic Fever

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Crimean-Congo haemorrhagic fever (CCHF) is a widespread tick-borne viral disease, a zoonosis of domestic animals and wild animals that may affect human beings.

Symptoms of Congo Fever

Human beings usually show symptoms within 9 days after a tick bite or contact with infected blood. They get a flu-like illness and blood spots appear under the skin. More severe bleeding and liver disease often follow. About 30 percent of people contracting Congo fever may die. Because this is a viral disease, antibiotics are not an effective method of treatment. The symptoms of Congo fever should not be confused with those of tick-bite fever where a characteristic lesion often develops in the area of the tick bite. There are also other diseases which may cause fever and bleeding under the skin.

Transmission to human beings

Congo fever is transmissible to humans through contact with infected blood, other tissue or a tick bite. People handling livestock or ostriches during routine procedures, such as castration, the inserting of eartags, vaccinations or slaughtering of animals, are at risk. People can also get infected through the handling of ticks.

Incubation Period

The incubation period is influenced by the route of exposure. Infections acquired via tick bites usually become apparent after 1 to 3 days; the longest incubation period reported by this route is nine days. Exposure to blood or tissues usually results in a longer incubation period. Current estimates suggest that these infections become apparent, on an average after 5 to 6 days. Incubation periods up to 13 days have also been reported.

Is meat safe for human consumption?

There is no evidence that the Congo fever virus may be transmitted to human beings in meat processed and matured according to health regulations. This virus does not survive in meat which is cooked or matured (which has low pH) or in dried blood.

Prevention and Control: Public

As a preventive measure for public, following measures can be taken.

- Educating the public about the mode of transmission through tick bites, handling ticks, and handling and butchering animals, and the means for personal protection. Tick control with acaricide (chemicals intended to kill ticks) is a realistic option for better management of livestock production facilities. Animal dipping in an insecticide solution is recommended.
- Public should avoid tick-infested areas when feasible especially when ticks are active (spring to fall). To minimise exposure, wear light clothing that covers legs and arms, tuck pants into socks, regularly examine clothing and skin for ticks, and apply tick repellent such as diethyltoluamide (Deet®, Autan®) to the skin or permethrin (a repellent and contact acaricide) to pant legs and sleeves.
- Persons who work with livestock or other animals in the endemic areas should take practical measures to protect themselves. They include the use of repellents on the skin (e.g. Deet) and clothing (e.g. permethrin).
- Butchers should wear gloves and other protective clothing to prevent skin contact with infected tissues or blood.
- In case of death of CCHF patient, family should be informed to follow safe burial practices.

In the institutional settings including hospitals and health facilities, following steps can be adopted.

- The patient should be treated in a separate room under strict barrier nursing and only designated medical / para-medical staff and attendants should attend the patient. Non-essential staff and attendants should not be allowed to enter the room.
- All secretions of the patient and hospital clothing being used by the patient should be treated as infectious, and autoclaved before incinerating.
- All medical and para-medical staff and attendants should wear disposable gloves, dispos-

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- able masks and gowns (gowns should be autoclaved before sending to the laundry or incineration). Use of disposable items should be ensured by supervisor.
- Every effort should be made to avoid spills, pricks, injury and accidents during the management of patients. Needles should not be re-capped but discarded in proper safety disposal box.
- All used material e.g. syringes, gloves, cannula, tubing etc. should be collected in autoclavable bag and autoclaved before incinerating.
- All instruments should be de-contaminated and autoclaved before re-use.
- All surfaces should be decontaminated with liquid bleach.
- The samples for laboratory testing should be properly collected, labelled, sealed and decontaminated from outside with liquid bleach and packed in triple container packing.
- The designated laboratory should be informed about the sample and it should be transported to the designated laboratory with great caution, ensuring that there would be no breakage or spills.
- After the patient is discharged, room surfaces should be wiped down with liquid bleach to kill the virus and the room should be fumigated. ■

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