Rabies the disease

Rabies is a viral disease affecting the central nervous system. It is transmitted from infected mammals to man and is invariably fatal once symptoms appear.

Transmission

Rabies is a zoonotic viral disease which infects domestic and wild animals. It is transmitted to other animals and humans through close contact with saliva from infected animals. The exposure is always nearly through a bite, but rabies can also be transmitted if a rabid animal scratches a person or if its saliva comes into contact with broken skin.

The time between exposure and the onset of symptoms is variable but averages two to twelve weeks in humans. Incubation periods of over one year have been reported.

Person to person transmission is extremely rare; however, precautions should be taken to prevent exposure to the saliva of the diseased person. Tissues from individuals with rabies must not be used in transplant procedures.

Rabies is widely distributed and present on all continents of the world. More than 55 000 people die of rabies each year. More than 95% of human rabies deaths occur in Asia and Africa. Most human deaths follow a bite from an infected dog. Between 30% to 60% of the victims of dog bites are children under the age of 15.

Symptoms of rabies

Early symptoms may include irritability, headache, fever and itching or pain at the site of exposure. The disease eventually progresses to spasms of the throat and muscles used for breathing, convulsions, delirium, paralysis and death. It is important to note that by the time any symptoms appear, rabies cannot be successfully treated.

Treatment

Anti rabies Post – exposure treatment

The most effective mechanism of protection against rabies is to wash and flush a wound or point of contact with soap and water, detergent or plain water, followed by the application of ethanol, tincture or aqueous solution of iodine.
Anti rabies post exposure therapy will be administered after screening according to the
guidelines given in the circular issued by the Ministry of Healthcare and nutrition. (G.C.
Letter No. 02-88/2008 dated 07-08-2008).

Suturing (closing the wound) should be postponed, but if it is necessary immunoglobulin
must first be applied. Where indicated, anti-tetanus treatment, antimicrobials and drugs
should be administered to control infections other than rabies.

In case of human exposure to animals that are suspected of having rabies, immediate
attempts should be made to identify, capture or kill the animal involved.

Prevention and control activities include:

1. Promoting of proper and immediate care of dog bite wounds;
2. Promoting of proper application of effective and economical rabies post-exposure
treatment;
3. Preventing of dog rabies through dog vaccination and promotion of responsible
dog ownership.
4. Control of dog population by sterilization and fertility control measures.

Prevention of human rabies must be a community effort involving both veterinary and
public health officials. Rabies elimination programmes focused mainly on mass
vaccination of dogs are largely justified by the future savings of discontinuing prevention
programmes. However, until canine rabies is eliminated or at least well controlled, safer
and more economical post-exposure treatments for humans are a desirable alternative.

Reference
1. Current WHO guide for rabies pre and post exposure prophylaxis in humans
2. Report from WHO Expert Consultation on Rabies, Geneva, Switzerland, 5-8
4. General Circular No: 01-14/2007- 11.08.2007 – Office of the Director General of
Health Services, Ministry of health, Colombo 10.