



## PIC QUESTION OF THE WEEK: 10/09/06

Q: What are the general recommendations for treating animal bites?

A: Recent cases of animal bites and rabies have generated interest in current recommendations for their treatment. Even though cat and dog bites are common and usually not very serious, some can be potentially life-threatening and victims should seek immediate medical attention. Complications include wound infection, sepsis, osteomyelitis, and tendon laceration. Animal bites usually occur on the arms and legs, particularly the hands. The more serious and often fatal bites involve the neck and head. Primary pathogens are species of *Pasteurella* followed in frequency by *Streptococcus*, *Staphylococcus*, *Moraxella*, *Corynebacterium*, and *Neisseria*. A positive wound culture from an infected cat or dog bite can help direct antibiotic therapy. The drug of choice in these instances is amoxicillin/clavulanate. For dog bites, clindamycin and a fluoroquinolone or trimethoprim/sulfamethoxazole are acceptable alternatives. Cat bites, on the other hand, may be treated with cefuroxime or doxycycline. Of additional concern during treatment of animal bites is identification of the risk of rabies and prevention of the disease. Efforts are taken to obtain information about the offending animal and, if wild, the demographics of animals in that region. If rabies is suspected, therapy for previously unvaccinated patients consists of administration of both rabies immune globulin and rabies vaccine. For adults, rabies immune globulin (RIG) is administered on the day of exposure. The full dose should be infiltrated around the wound (s) and any remaining volume injected intramuscularly (IM) at a site distant from where the vaccine will be given. Intramuscular injection of rabies vaccine into the deltoid muscle (lower thigh for children) should be made as soon as possible after exposure, and repeated on days 3, 7, 14, and 28. The RIG and vaccine should not be given in the same syringe. Wounds at high risk for rabies must be washed with soap and water. If available, a povidone-iodine solution should be used to irrigate the area. High risk wounds should be left unbandaged for 48 to 72 hours to decrease the risk of infection. Tetanus immunization may also be required following an animal bite if no booster has been administered in the previous five years. Animal wounds can range from simple scratch to a severe bite resulting in life-threatening infection. Prevention of infection caused by *Pasteurella* species, rabies, or tetanus can mean the difference between life and death.

### References:

- CDC: Human rabies prevention - United States, 1999. Recommendations of the Advisory Committee on Immunization Practices (ACIP). <http://www.cdc.gov/mmwr/preview/mmwrhtml/00056176.htm> (accessed 2006 October 5).
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