

Health Briefs

by GERRY CLARK
Assistant Editor

Managing dog and cat bites

Taking a thorough medical history is essential for physicians in assessing and managing patients with bite wounds, a report in the August 1995 *American Family Physician* states.

An estimated one million to two million Americans are bitten by cats and dogs annually. Most victims are children bitten by dogs. While bites might appear trivial, if they aren't appropriately managed, they may become infected and result in functional impairment, researchers stated. Cat-bite wounds on the hand pose the greatest risk of infection.

Useful information for determining a patient's risk of wound infection and rabies includes: the animal's general health and immunization status; whether the animal was provoked; and the time of injury. Also, the patient's tetanus immunization status, and current medications and allergies should be noted, researchers stated.

Bites may result in severe crush injuries and deep puncture wounds, as well as lacerations and skin avulsions, so muscular and neurovascular compromise should always be ruled out.

History of chronic illness, immunocompromising conditions, immunosuppressive therapy, or presence of a prosthetic valve or joint should be noted, according to researchers.

Physical examination should include measuring and classifying the wound as either laceration, puncture, crush injury or avulsion. Also, a neurovascular exam should be conducted.

The wound should be cleansed by using a 1 percent povidone iodine solution. Using either normal saline or Ringer's lactate solution might reduce the rate of infection up to 20-fold and is essential in proper bite-wound management.

Cat and Dog Bites: Incidence of Infection



Children suffer more dog bites than cat bites annually. However, roughly 30 percent to 40 percent of cat bites become infected while only 15 percent to 20 percent of dog bites result in infection. Immunocompromised individuals should seek medical attention immediately if bitten or scratched. To prevent bites, experts advise avoiding animals while they eat and using caution around strange animals. Parents should never leave young children alone with a pet, regardless of an animal's perceived disposition.

Source: *American Family Physician*, volume 52, number 2.



David Zwierz

Clinically infected wounds, wounds older than 24 hours and puncture wounds should be left open. Most hand-bite wounds more than 24 hours old should not be closed primarily. If closure is needed, wound edges should be loosely approximated so as not to interfere with drainage.

All bite wounds should be elevated, researchers stated.

Otitis-media treatment variations

Family physicians would prescribe high-cost antibiotics to treat persistent middle-ear effusions twice as often as

pediatricians, according to a study published in the August 1995 *Archives of Pediatric and Adolescent Medicine*.

For the study, physicians were asked to choose various management options for two hypothetical case-management scenarios: a persistent asymptomatic middle-ear effusion and recurrent otitis media.

AAP Colorado Chapter members and members of the Colorado Academy of Family Medicine were surveyed. Surveys were sent to a randomly selected group of 250 family physicians and 175 pediatricians. One hundred forty-two family physicians and 114 pediatricians responded.

At the six-week visit, 50 family physicians would administer an oral decongestant alone or combined with other therapy, compared to 16 pediatricians, researchers reported. Family physicians would refer patients for ventilating tube surgery three times more often than pediatricians at nine-week visits.

Both physician groups would manage recurrent acute otitis-media episodes similarly, researchers stated.

Needle phobia

Physicians can use several methods to manage patients' needle fears, according to an article in the August 1995 issue of *The Journal of Family Practice*.

Those with needle phobia often are terrified of routine needle procedures, the article states. Minor needle procedures, such as venipuncture or subcutaneous injection, can cause a vasovagal shock reflex and evoke patient resistance. Those with needle phobia tend to avoid medical treatment. The condition is sometimes

fatal, due to its associated vasovagal reflex.

To ease patients' anxieties, physicians should express empathy and respect for needle-phobic patients, explaining that many others share their fear. Reassurance and education are helpful, the article states.

Physicians also can:

- Utilize alternative drug-delivery methods, such as topical analgesic patches and opiate suppositories in cases of severe pain;
- Use nerve gate-blocking methods, such as pinching or rubbing the area, to distract the patient during a needlestick;
- Have patients lie supine with legs elevated and tense their muscles during needle procedures to increase cerebral blood flow in order to reduce shock and syncope; and
- Routinely medicate needle-phobic patients with oral, sublingual or intranasal benzodiazepines, or with NO₂, or both.

In addition, topical anesthesia of the autonomic sensory neural net at the site of the needle injection may be used to interrupt the vasovagal reflex at its point of origin so that the reflex is not triggered.

Although other methods exist, the preferred way to anesthetize the skin is the use of topical anesthetics containing a mixture of lidocaine and prilocaine, which have been shown to work well in pediatric patients, the article states.

A technique known as iontophoresis enhances topical anesthesia depth and effectiveness. The technique involves soaking an absorbent pad with lidocaine and driving it through the skin with a tiny electrical current from a battery-powered unit. Iontophoresis can completely anesthetize an injection or veripuncture site to

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