



# Canine First Aid

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# Who is this guy?



- BS, Biology from SUNY Geneseo.
- DVM from Cornell University in 1995
- MBA from University of Maryland in 2013
- Partner at a multi-doctor small animal practice
- ER veterinarian for last several years
- Named by peers as one of Northern Virginia's Top Veterinarians
- NAVHDA Apprentice Judge



# Agenda

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- Wounds
- Porcupines
- Snakebites
- Heatstroke
- Allergic Reactions
- First Aid Kits



# Wounds



Photo credit: Courtney-Ann Cartledge



# Principles of Wound Therapy

- Stop bleeding (pressure, close wound)
  - if spurting or bleeding cannot be stopped, ER
- Clippers to trim hair from wound edges (if possible)
  - Use KY jelly to keep hair from falling into wound
- Clean wound of contamination
  - Don't use your dirty fingers!
  - Use saline, not peroxide or alcohol; these actually delay healing
  - Contact lens solution (sterile saline); use nozzle to flush



# Principles of Wound Therapy

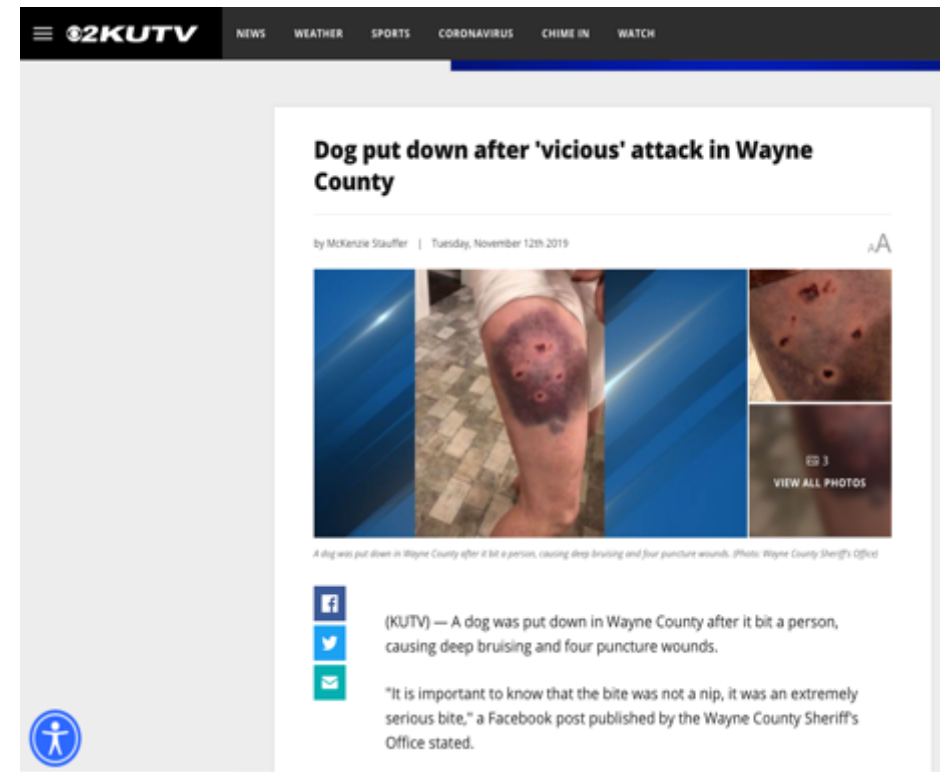
- SuperGlue is a great tissue adhesive
  - If wound larger than 1" in length, skin stapler as a temporary fix
  - Establish ventral drainage:
- Leave a gap on the lowest part of wound
- Bandage if you can; non-stick dressing, antibiotic ointment.
- Start antibiotics if >12 hrs from veterinarian
  - Clavamox or amoxicillin





# Puncture Wounds

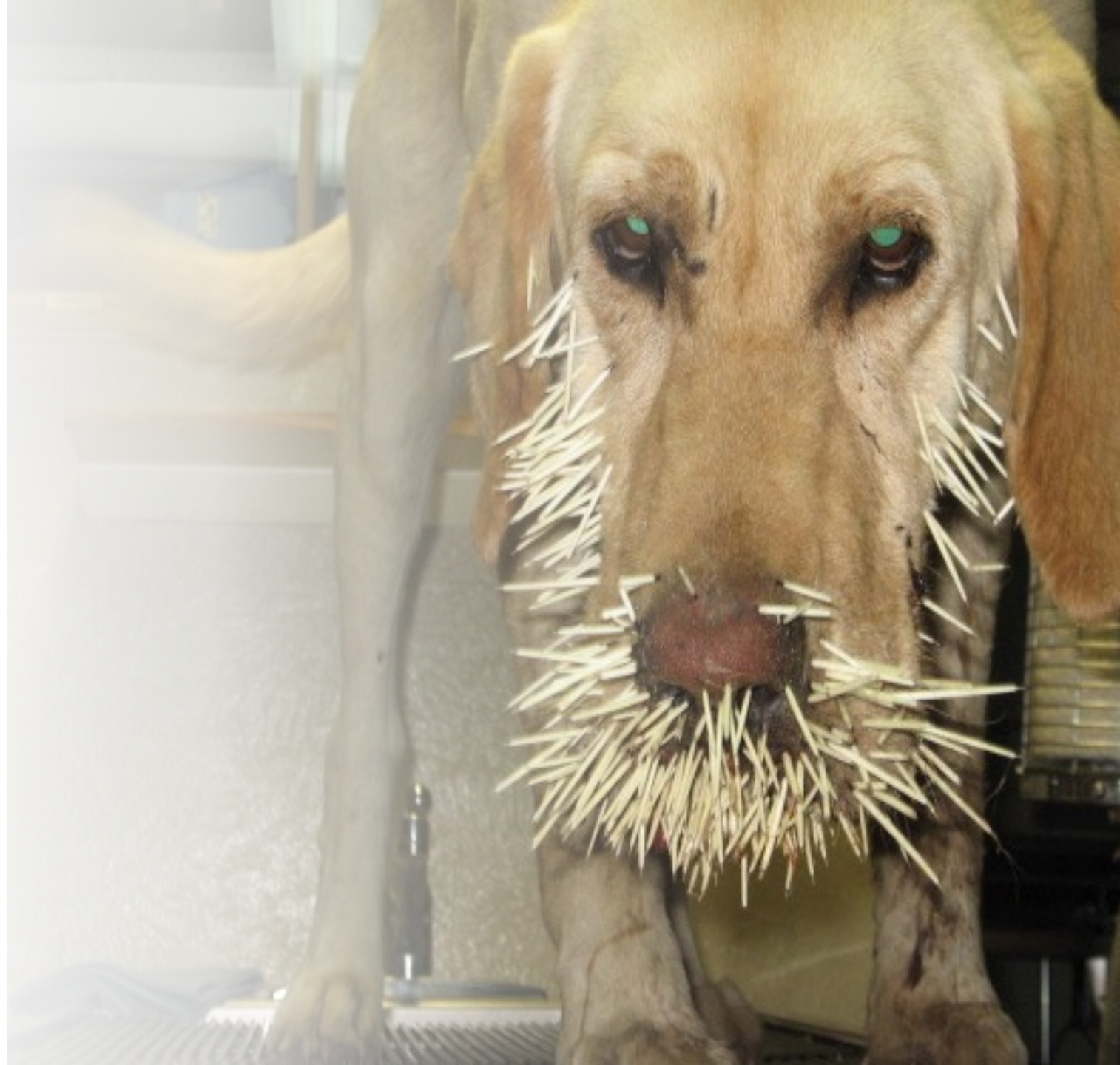
- i.e. Bite wounds
- Biggest difference: do NOT seal these up.
  - Flush with sterile saline
  - Clean wound edges
  - Antibiotics
- Need to heal from "inside out" or will abscess



# Porcupines

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- Nightmare
- Needle nose pliers - grab at base & remove.
- May need anesthesia to get them all.
- Use your fingers to ensure you got them all.
  - Don't get bit!
- Can migrate and become draining tracts
  - Watch face/neck/chest for swellings or abscesses.





# Porcupines

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## Common misconceptions

- Porcupines can “throw” quills
- Cutting the tip off helps remove them

95% of dogs affected this badly are going to need a vet for sedation and removal.

The other 5% are hunting dogs who MIGHT be tolerant enough to sit there while you remove them without pain meds/sedation.



# Snakebites

- Severity varies widely
  - Depends on species of snake
  - +/-30% of snakebites are “dry.”
- Key clinical signs
  - PAIN
  - Extensive swelling
  - Bite marks often not seen





## Snakebites

- Should be seen ASAP by a vet
- If a vet not available:
  - Muzzle (except if bitten in face)
  - Antibiotics
  - Antihistamines
    - 100mg Benadryl
    - 4 adult tabs/caps
- Do NOT use tourniquet
- Do NOT try and suck out venom
- Do NOT apply ice or topical meds
- Do NOT bother catching the snake



Photo credit: Shea Cox, DVM

# Hyperthermia (i.e. “heat stroke”)

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An ounce of prevention...





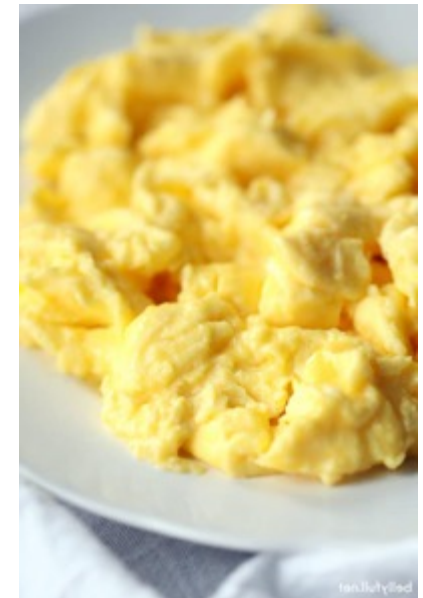
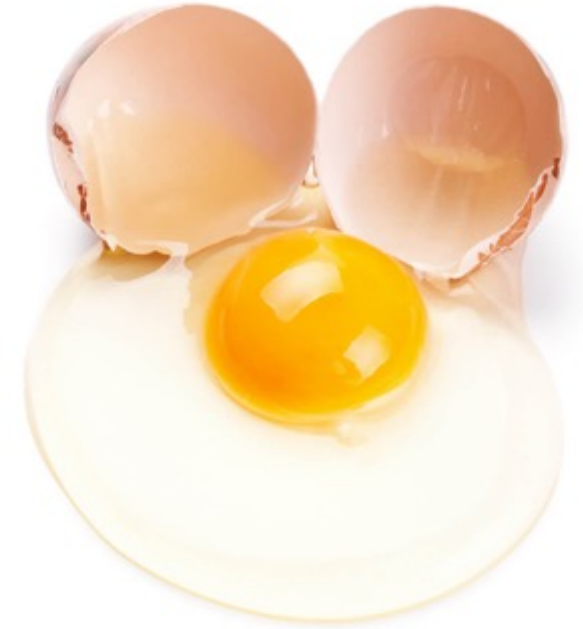
# Hyperthermia: Early signs

- Panting, Dehydration, excessive drooling
- Increased body temperature (above 104° F; 39° C)
- Reddened gums
- Rapid/irregular heart rate, wobbly/appearing “drunk”
- Seeking shade, laterally recumbent



# Hyperthermia: Later signs

- Depression
  - Off food
  - Bloody vomit/diarrhea
  - Bruising, seizures, death.
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- Very concerned when rectal temp  $> 106$
  - “Scrambled egg” analogy
    - intestinal linings and blood clotting



# Hyperthermia: Prevention

- Set alarm to cool dog every 10 minutes
- Mandatory drink after every bird/contact
- Best places to cool dog:
  - Ears
  - groin/armpit
  - neck/chest
- Wetting their back
  - not harmful, just much less effective





# Hyperthermia: Treatment

- Cool them down
- Do NOT use cold water
  - room temperature water is fine
  - stop cooling them @103
  - prevent rebound HYPOthermia



Picture here

# Allergic Reactions

- Causes:
  - Bug bites (spider, bee or wasp stings)
  - Drugs (vaccines, meds, antibiotics, etc.)
  - Chemicals in the environment (household cleaners, air fresheners, etc.)
  - Common natural allergens (pollen, mold, etc.)
- Signs
  - Sudden onset swollen face; usually non-painful
  - Hives
  - Itching



Photo credits: Dr. Justine Lee

# Allergic Reactions (cont'd)

- Differentiate from snakebites or other trauma (very painful)
- Breathing affected? Collapse? (thankfully rare in dogs; definite trip to ER)
- Treatment: depends on severity
  - oral Benadryl (diphenhydramine): 1mg per pound in dogs
    - not fast acting, can prevent worsening
    - safe but not terribly powerful
  - injectable meds (Benadryl, corticosteroids)
    - very fast acting, often given in combo by a veterinarian
    - if oral therapy not helping or if dog is miserable



# First Aid Kits

## -Comprehensive list

Eye Flushing Solution (Saline)  
Chlorhexidine, 2% Cleansing Solution, 8oz  
Isopropyl Alcohol, 50-70% (1)  
Hydrogen Peroxide, 3% - in date  
Water Soluble Jelly i.e. K-Y  
Triple Antibiotic Ointment tube (1)  
Muzzle  
Large Exam Gloves, disposable latex free  
Hand Sanitizer / Antibacterial Hand Wipes  
Stethoscope (an inexpensive, \$25 one is fine)  
Shears or Scissors  
Penlight  
Hemostats, needle nose pliers, tweezer kit  
Digital Thermometer  
Toenail Trimmers  
Styptic powder  
SuperGlue ("tissue glue")  
Cold Compress Packs (2)  
Hand Towel  
Diphenhydramine, i.e. "Benadryl", (24)

20ml Syringe (2),  
60ml Oral Tip Syringe (1)  
Athletic tape, 1" (2)  
Elastic Tape, [Elastikon], 2" (1)  
VetWrap/CoFlex, 2", 4" (2 each)  
Gauze Bandage Roll, 2" (2) / 4" (4)  
Cotton Cast Padding Roll, 2" (2)  
Gauze Pads, 4 x 4 (12)  
Non-adherent dressing Pads (6)  
Collapsible water bowl

Battery operated clippers  
Skin stapler  
Plastic Wrap (i.e. Saran Wrap)

Antibiotics (Clavamox, Metronidazole)

Joy dish soap (best for skunked dogs)

**Be decisive.**

**Right or wrong,  
make a decision.**

**The road of life  
is paved with  
flat squirrels  
who couldn't  
make a decision.**



Questions?  
Comments?

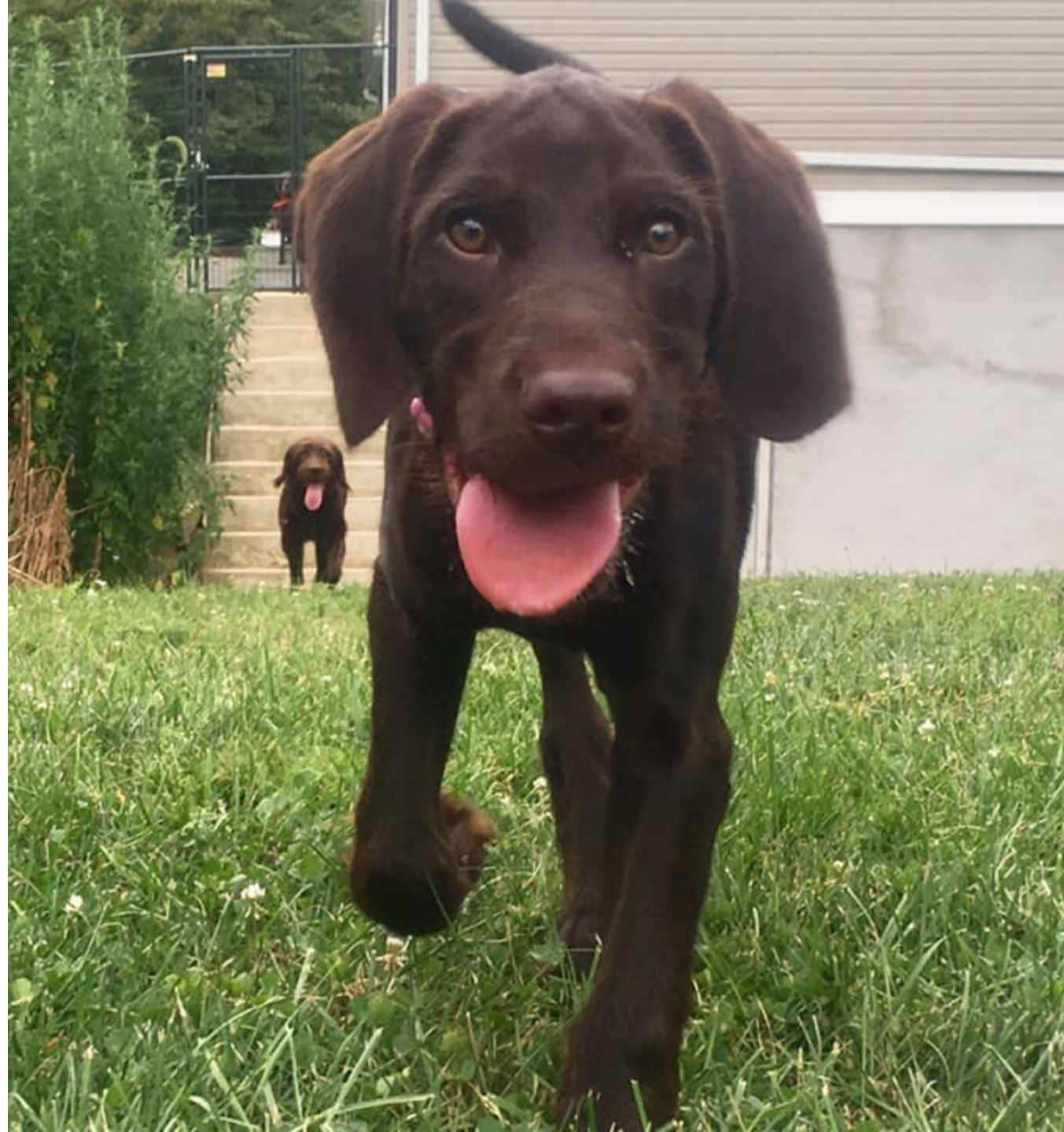


Photo credit: Cristin Murray