

Welcome



- Introduction and Moderator is Dr. Hilty Burr
- Presentation sponsor is Celebration of Pets Foundation (501C3 non-profit)
 - Kudos and big thank you's go to Maureen Patrick (Secretary of the Board) & Greg Patrick, board member & webinar coordinator
 - Please visit website www.celebrationofpetsfoundation.org

Celebration of Pets Foundation

Strengthening the Human / Pet Bond



- Our Beneficiaries (alphabetical)

1. Castoff Pet Rescue, Blairsville GA... shelter for homeless dogs and cats
2. Katz and Dawgs Helping Hands, Hiawassee GA... pet transport service
3. Lucky Paws Cat Rescue, Warne NC ... feral cat rescue
4. Mountain Shelter Humane Society, Blairsville GA... shelter for homeless dogs and cats
5. New Digs for Dogs, Brasstown NC... foster networking service for homeless pets
6. Operation PUP, Hiawassee GA... provides funds for spay / neuter and rabies vac
7. PAWS Working Dog Support Network, Blairsville GA... identifies and provides training for Working Dogs (ex. Police K-9 Units and First Responders), and trained Medical Service Dogs; provides Instructor Training Classes
8. Valley River Humane Society, Marble NC... shelter for homeless dogs and cats

Pet First Aid / CPR Part 1

Speaker Introduction



- Dennis T. Crowe (Tim), DVM = Diplomate, ACVS – Emeritus; Diplomate, ACVECC; Fellow, American College of Critical Care Medicine; Member, American College of Hyperbaric Medicine
 - DVM degree Iowa State, internship Colorado State, surgical residency Ohio State, Assistant Professor of Surgery at KSU, Associate Professor of Surgery & Chief of Emergency / Critical Care Services at UGA, Director of Research at the Veterinary Institute for Trauma, Emergency, and Critical Care & Chief of Surgery at the Animal Emergency Center in Milwaukee, and held positions at Western Nevada Veterinary Specialists, Chief of Staff & Surgeon at Pet Emergency Clinic and Specialty Hospital in Thousand Oaks and Ventura CA, Georgia Veterinary Specialists in Atlanta, Santa Cruz Veterinary Hospital, Surgeon at All Pets Emergency and Referral Center in Alpharetta GA, and Chief of Surgery and Critical Care at RIVER in Chattanooga
 - Currently self-employed owner of Mobile Veterinary Surgery of Georgia performing small animal specialty orthopedic, neurologic, and soft tissue surgery
 - Inventor of over 50 emergency and surgery procedures including nasal oxygen, continuous abdominal closure technique, serosal patching, resuscitative thoracotomy and aortic occlusion, practical autotransfusion, esophagostomy tube insertion and use for gastric decompression and feeding, NG tube insertion and use, and Doppler use for monitoring of blood flow and CPR
 - Other lecture topics includes Ionized Alkaline Water, Hyperbaric Oxygen therapy, Bio-Physics Based Medicine such as Photonic Therapy, Bioresonance, Acupuncture and Chiropractic Procedures
 - Taught Basic and Advanced Disaster Life Support Course for Veterinarians and Veterinary Technicians as a member of the College of Public Health, University of GA Institute of Mass Destruction Defense & GA Emergency Management Agency and the Dept of Homeland Security

Dr. Crowe intro Part 2



“That’s not all, folks”

- Certified Rescue Specialist and Firefighter w/ Oconee County GA Fire Rescue, & licensed as an Advanced Emergency Medical Technician
- Published > 500 articles, given > 1000 invited lectures worldwide
- Awarded the Zaslow Award from VECC Society in recognizing his pioneering work and dedication to the advancement of veterinary emergency and critical care, the President’s Citation for his dedication to the advancement of human critical care from the Society of Critical Care Medicine, and a Mentors Award from the American College of Veterinary Surgeons for the years of providing mentorship to many residents throughout his career
- Great husband (married to Deb), father and grandfather
- Man of great Faith “who walks the talk”

Pet CPR





3/10/2021

Pet First Aid and Basic and Advanced Life Support

**Dennis T. (Tim) Crowe, Jr., DVM
DACVS-Emeritus, Charter DACVECC,
FCCM, NR Advanced EMT**

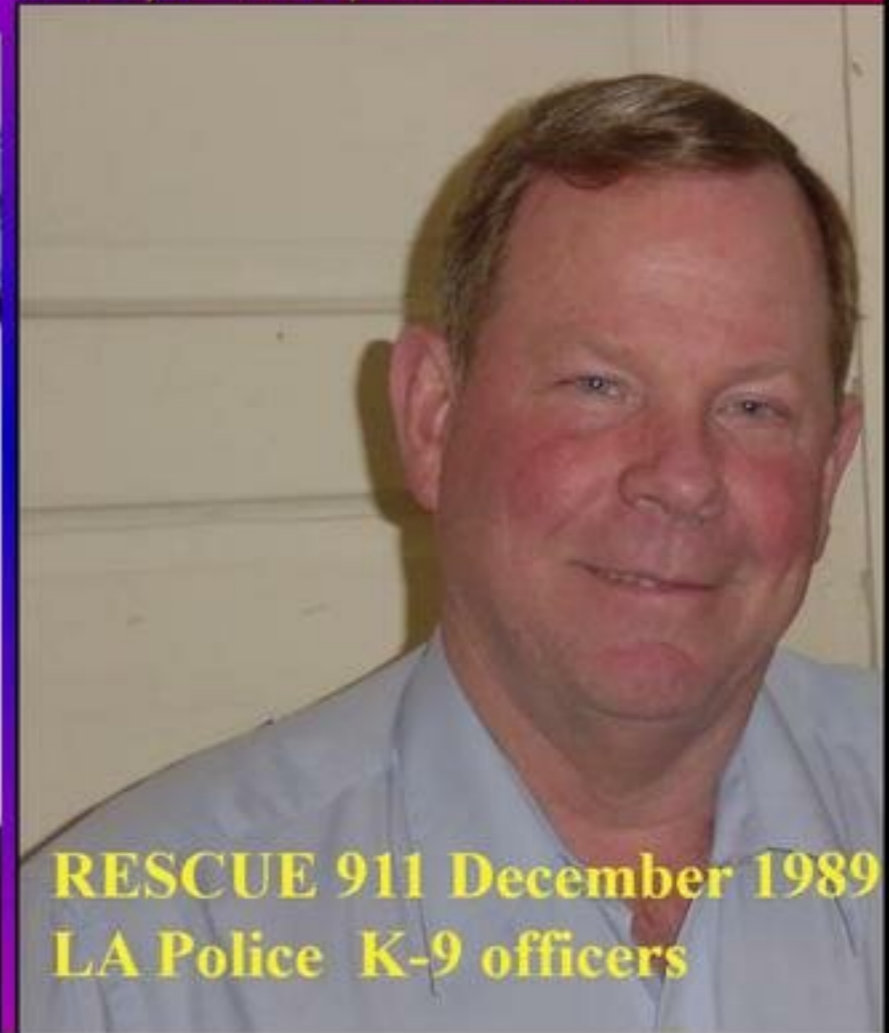
NFPA Certified FF and GEMA Rescue Specialist

Member National Disaster Life Support Foundation Consortium

Veterinary Surgery, Emergency, and Critical Care

Services and Consulting

John Anderson, BS, MS, PhD, DVM



**RESCUE 911 December 1989
LA Police K-9 officers**





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American College of
Hyperbaric Medicine

Hyperbaric oxygen therapy



Pet Ambulances and Pet Emergency Medical First Responders, VEMTs



Goals with All Emergency Care

Provide emergency care while maintaining safety

Provide first aid care to the most life-threatening conditions - The ABC conditions

Airway, Breathing, Circulation

Provide timely intervention to prevent further injury or complications; example: fractured jaw and injured tongue that blocked an airway.....



First Aid , Just like Firefighting;
Starts with Education and Training (Learning skills)

3/10/2021

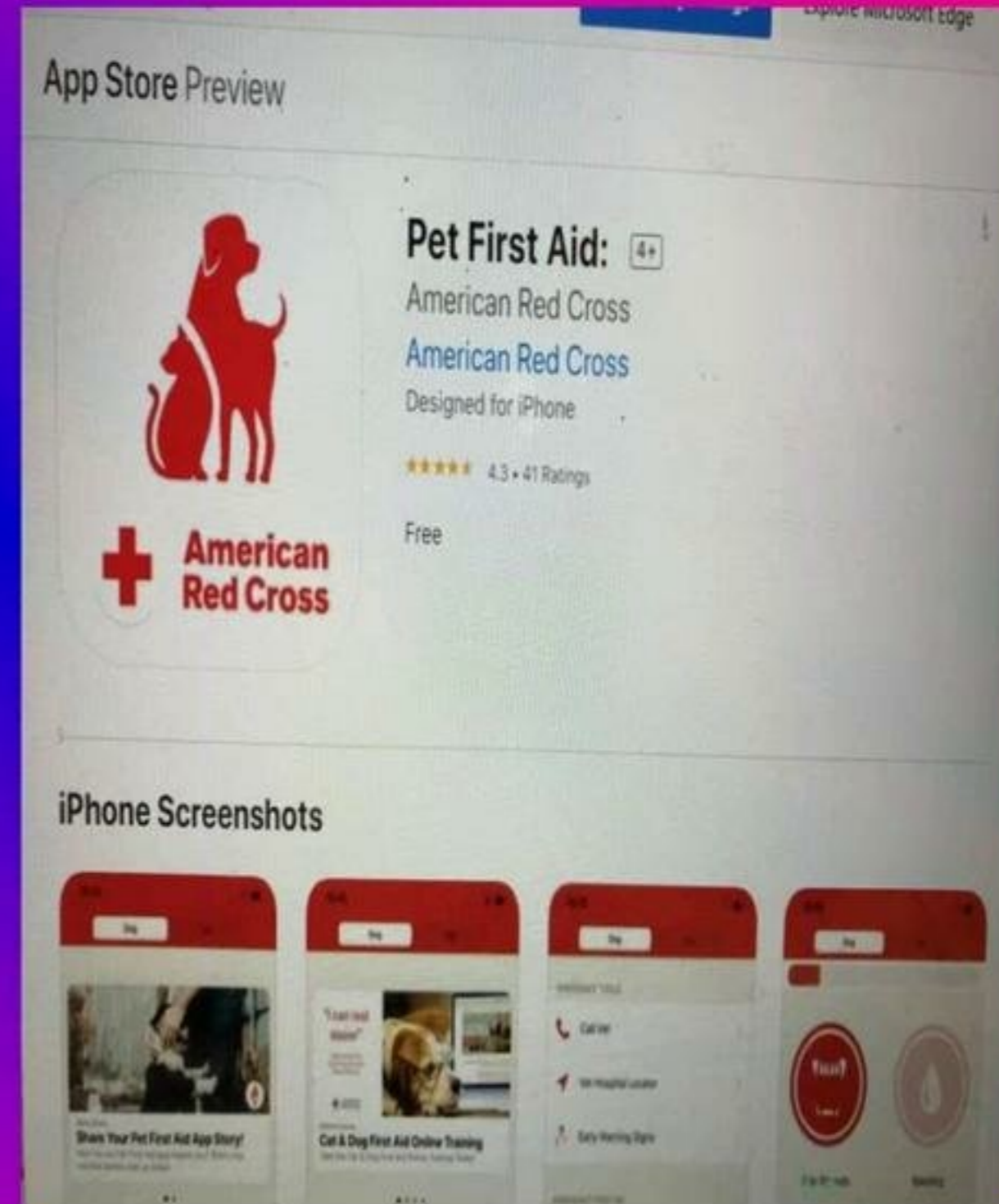
Both man and animals may need help in an emergency – knowledge and skills learned can be life-saving “ALL CREATURES....”



Direct pressure; gauze sponge soaked with blood ... do not remove! Add More Pressure and more gauze stuffed deep

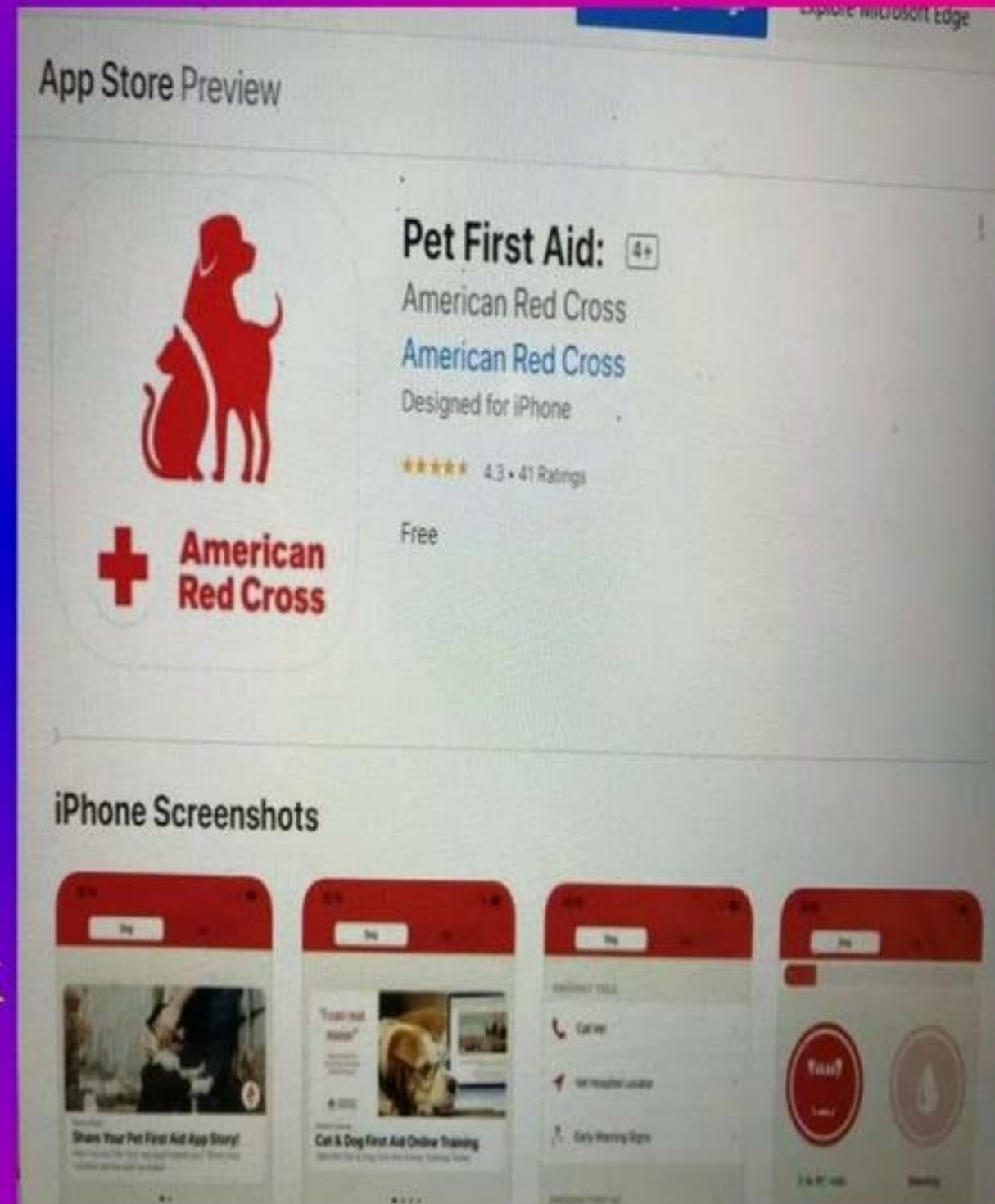


First PROCEDURES to do:



First PROCEDURES to do:

- ❑ Download Pet First Aid and CPR info from the internet onto your Smart Phone American Red Cross.
- ❑ A good start HANDY
- ❑ Review information on the internet, from this course; Take more courses
- ❑ Purchase a Pet First Aid book (Amer. Red Cross Bobby Mammoto, DVM, MPH)



Purpose – What to do in emergencies

(recognition, immediate care = FIRST AID)

**Classify emergencies – based on time before its
“Too Late”...**

**Example 1 airway obstructed by a piece of
food – Kibble in front of the larynx**

**Example 2 abdomen getting visibly distended;
uncomfortable = Gastric Dilation Volvulus**

**Example 3 foot stuck in a fence, see no obvious
bleeding, but dog is anxious and so are you....**

IN ALL THREE always do this FIRST.. Take a

deep breath then then assess & treat by priority

Rapid Assessment

Assess safety and risks— make safe

Primary Survey

- ❑ General impression
- ❑ Level of Consciousness
- ❑ Breathing fast, slow, degree of effort
- ❑ Oxygenation – mucus membrane color
- ❑ Cardiac function - pulse quality and rate
- ❑ Vascular volume - capillary refill time
- ❑ Hydration – membrane dryness,, skin turgor (flexibility)

Vital Signs (TPR) temperature only accurate

w/ thermometer, done carefully

take pulse rate , watch breathing,

and time number per 15 seconds x 4,



Immediate Assessment

Observe

Expected

Immediate Assessment

Observe

Expected

□ Level of Consciousness

BAR, QAR

□ Airway

Clear, quiet sounds

□ Respiratory Rate/ Effort

~12-20, effortless

□ Capillary Refill Time

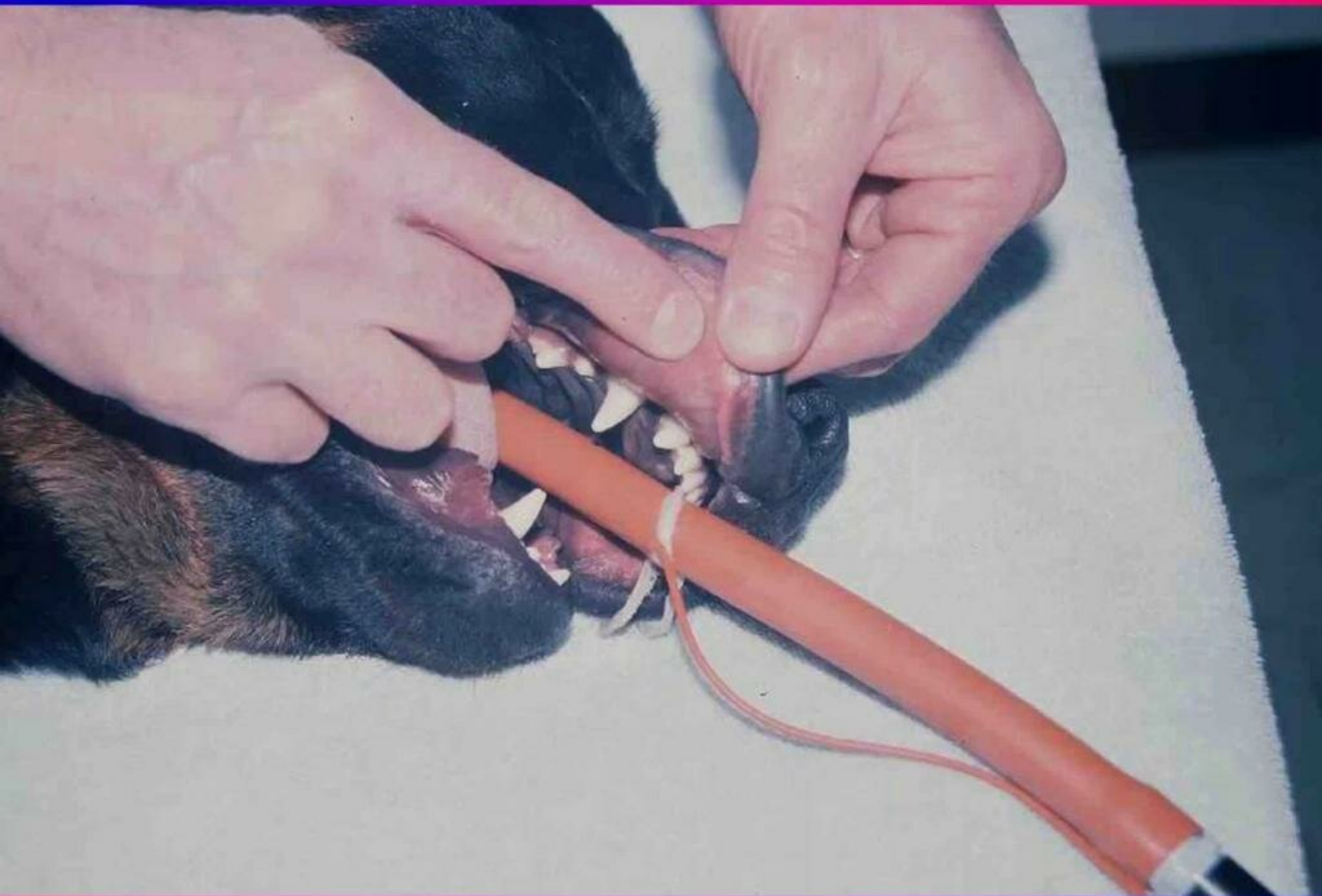
Less than 2 seconds

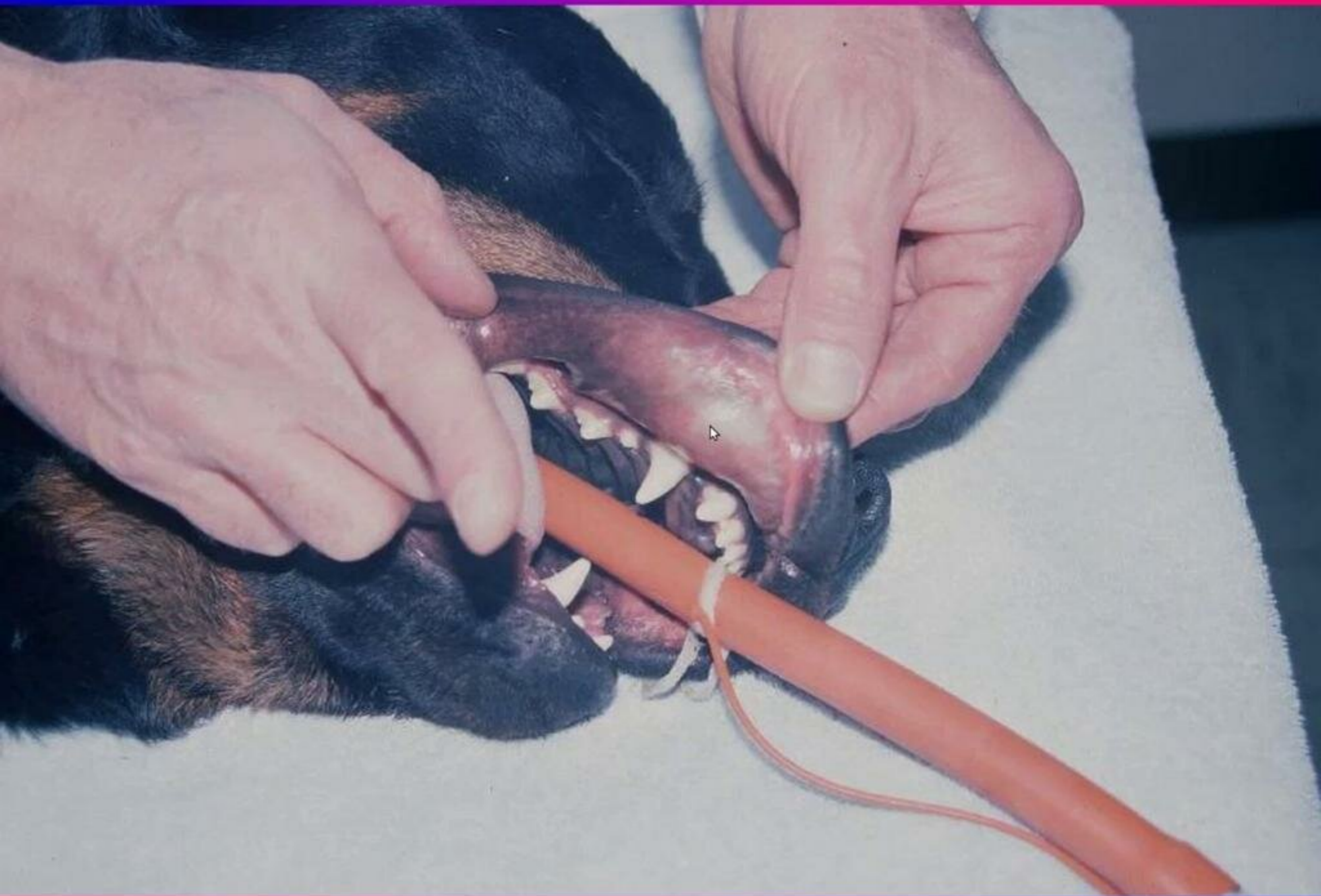
□ Mucous Membrane Color

Pink

□ Pulse Rate (femoral artery)

60-120 per minute











Caution - go very slowly if cold

If pet is having difficult laborious breathing

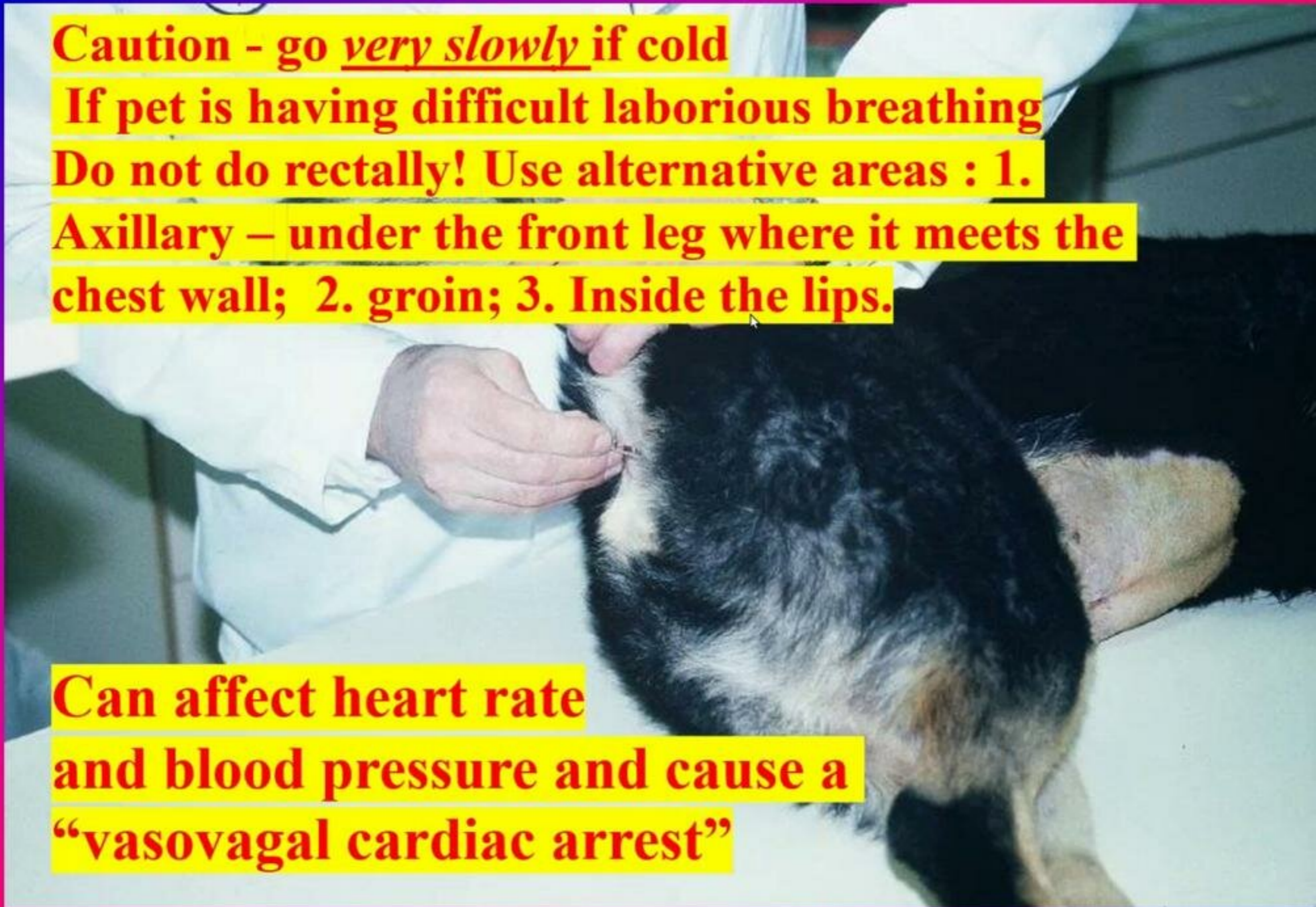
Do not do rectally! Use alternative areas : 1.

Axillary – under the front leg where it meets the chest wall; 2. groin; 3. Inside the lips.

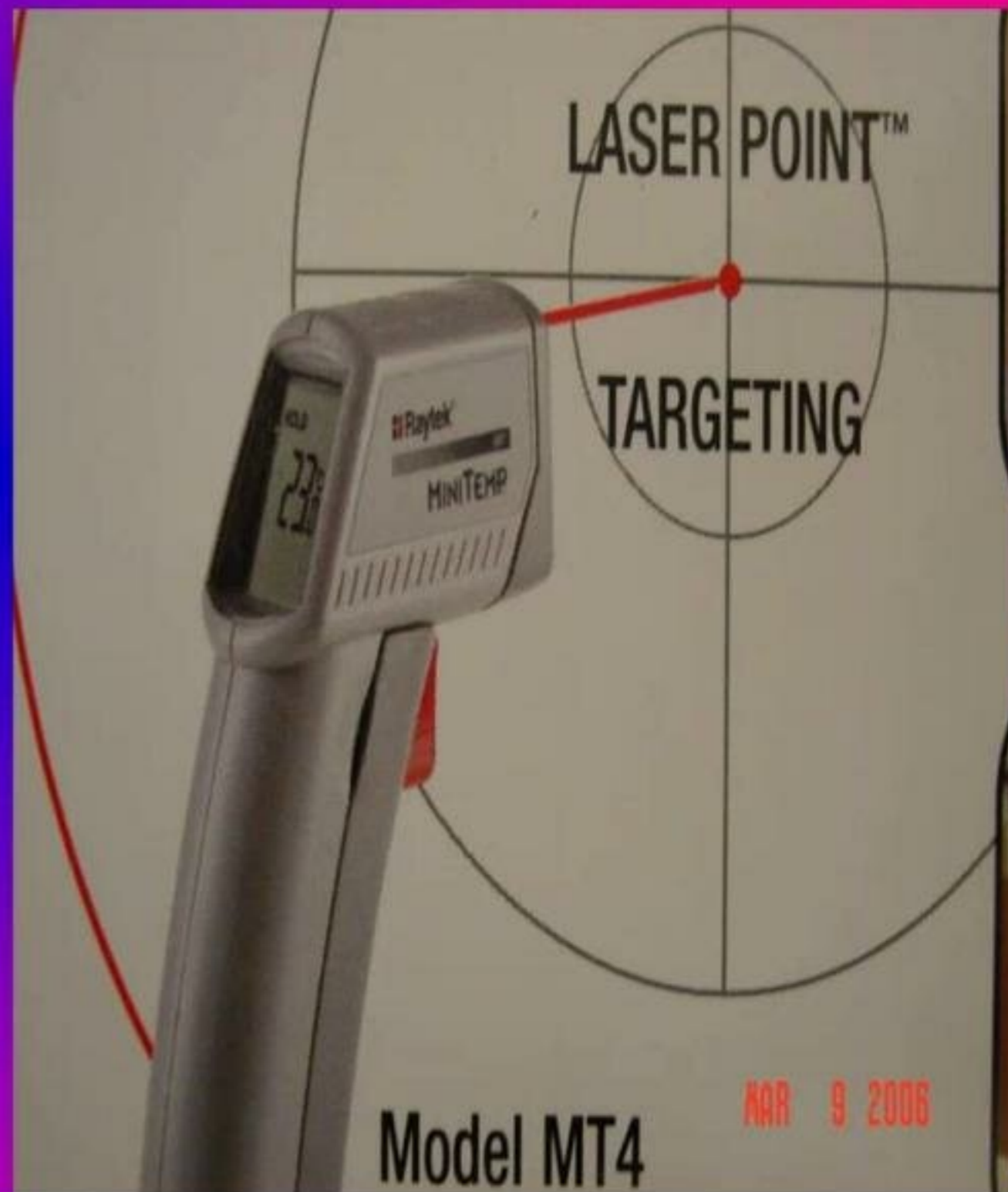
Can affect heart rate

and blood pressure and cause a

“vasovagal cardiac arrest”



Laser guided infrared thermometry



Manage the emergency in this priority:
A and do not go to **B** until **A** is managed;
B and do not go to **C** until **B** is managed;
C and do not go to **D** until **C** is managed

Airway

Breathing

Circulation

Disabilities

Everything else

Pharyngeal airway made from a syringe case. This allowed this injured dog with a fractured jaw a means of being able to breath – he recovered after surgery



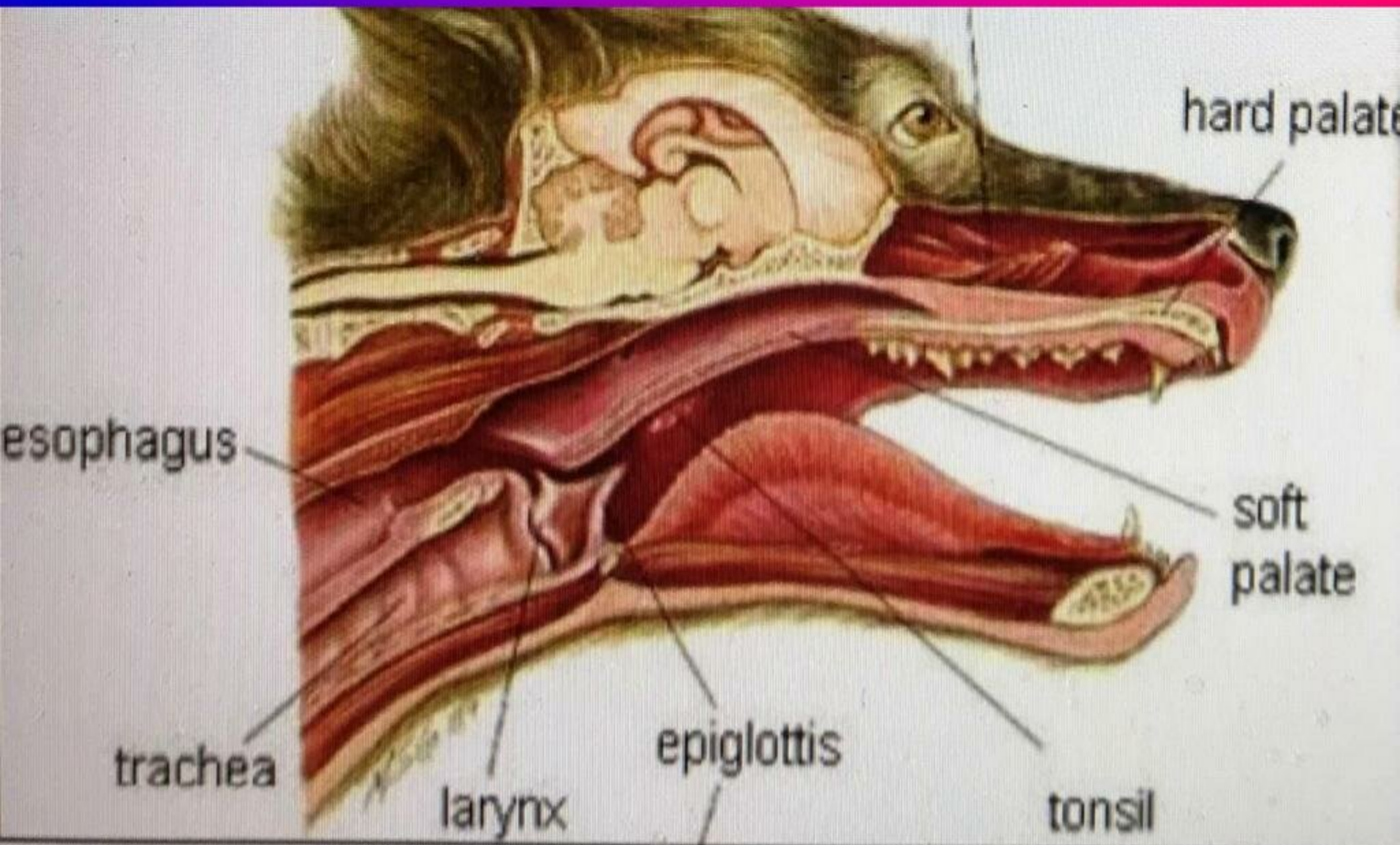


Photo complements of Dr Lee Palmer

Airway – awake

- ◇ Is the patient having difficulty breathing?
- ◇ Are there injuries to the oral cavity?
- ◇ Has a wound disrupted the trachea or larynx?
- ◇ Is there are possible foreign body?
- ◇ **SUDDENLY CAN NOT BREATH ...Think FB**
- ◇ **Modified Heimlich Maneuver – Pick back legs up and somehow squeeze the chest and abdomen w/ head down**
- ◇ **Consider shaking him with head down**





Head down and compress the chest and abdomen forced repeatedly.. Until the FB comes out or the pet becomes unconscious then assess again

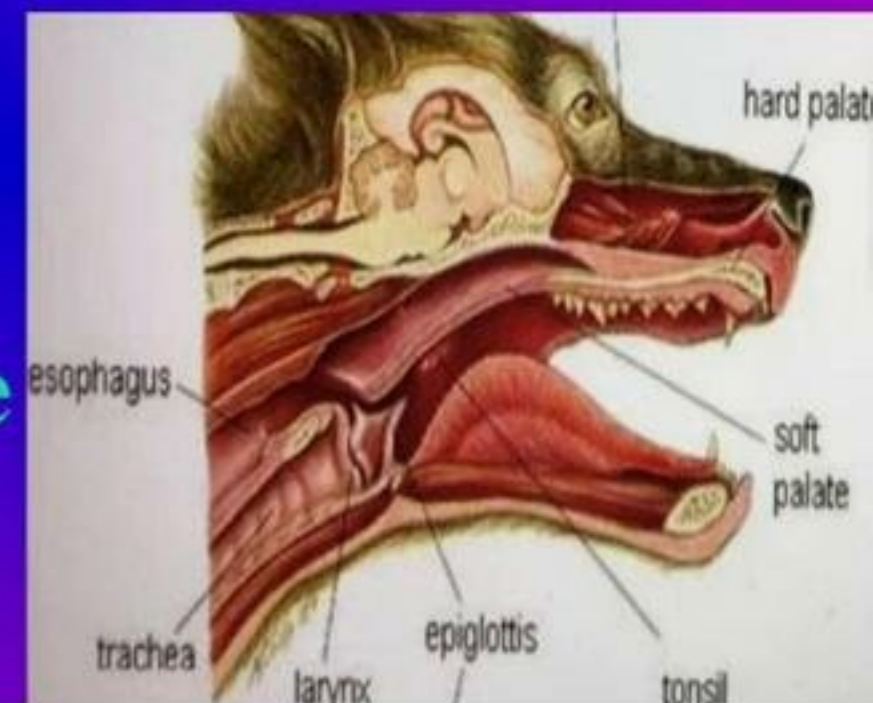
Super balls - stuck in larynx

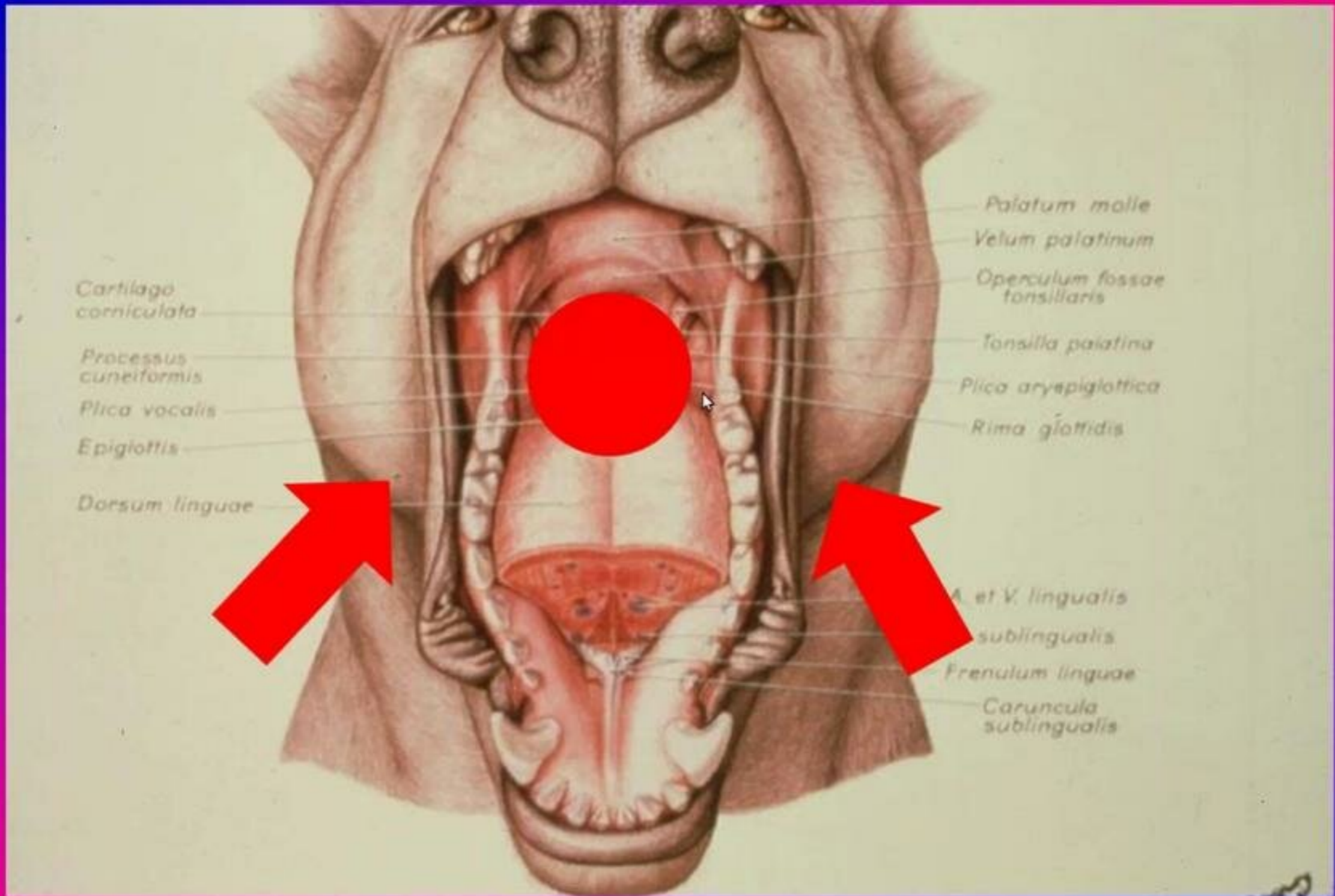
Dog food - in larynx, trachea

Meat - in pharynx, larynx

Peanuts, Marbles, Stones, Jelly Bean

Tennis balls - push on inside of mandible





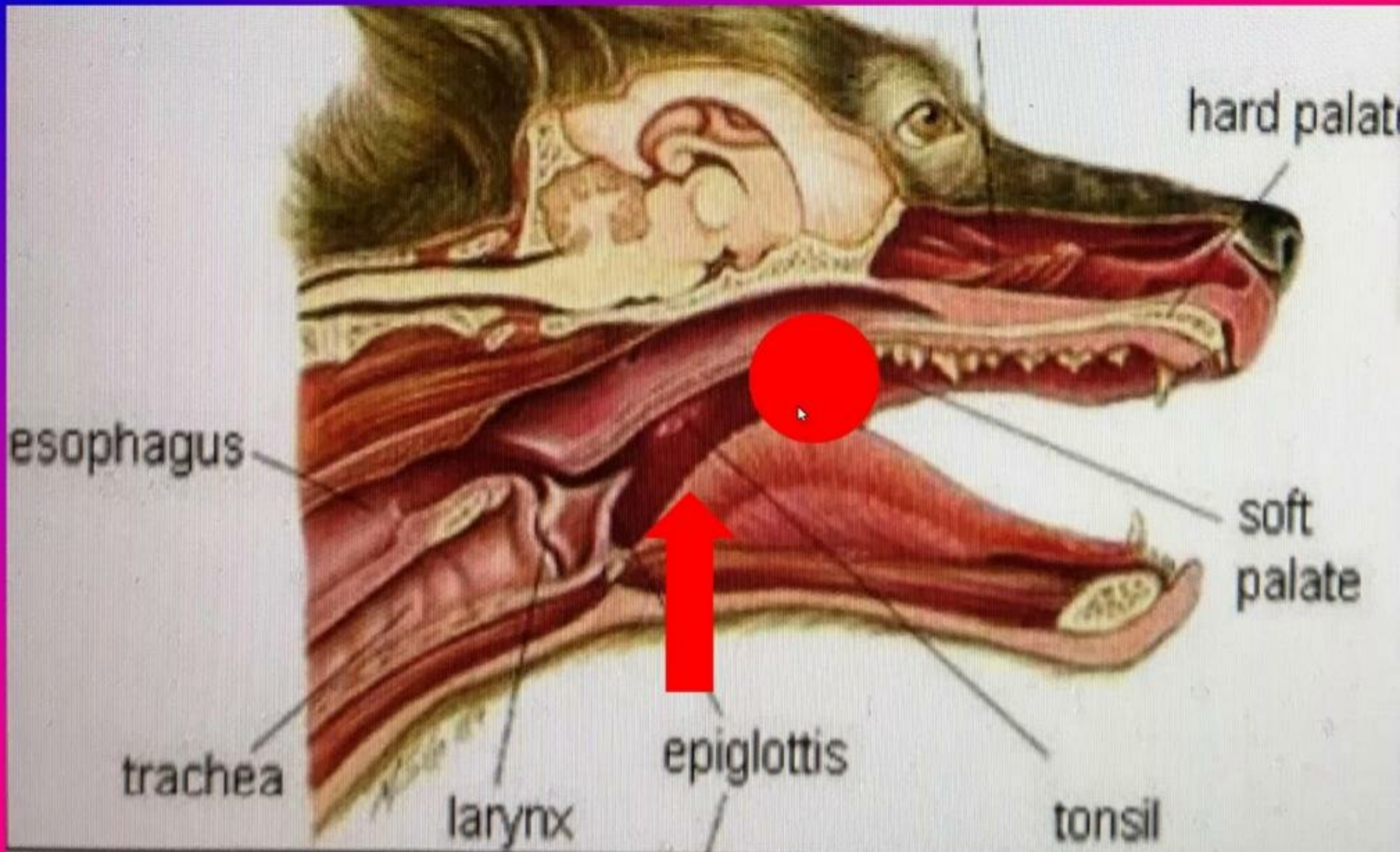


Photo complements of Dr Lee Palmer

Airway – unconscious – make sure

Extend the head and neck –

Pull the tongue out

Open the mouth – should be easy to do

Airway – unconscious – make sure

Extend the head and neck –

Pull the tongue out

Open the mouth – should be easy to do

**LOOK INSIDE – DEEPLY , USE CLAMP* TO
REMOVE FOREIGN MATERIAL or
CAREFULLY DO A FINGER SWEEP**



Forster sponge forceps

Towel clamp

Tenaculum clamp



Kelly hemostatic forceps (clamp)



Forster sponge forceps



Towel clamp

Tenaculum clamp

Kelly hemostatic forceps (clamp)



Go from pink



To blue
(cyanotic)



When unconscious

Open the mouth

Look for a foreign body

Remove with a clamp

Remove with a spoon

Last resort – finger sweep







AIRWAY

ASSESSMENT - look, listen, feel

A quiet airway is a good airway if breathing without distress..

In distress see:
tracheal tugging

INCREASED

INHALATION

**SOUNDS = 70%
OBSTRUCTION**

Guttural low pitched

Larynx = high pitched



AIRWAY

WHEN UNCONSCIOUS

- Extend head neck
- Open mouth
- Pull tongue forward
- Inspect back of mouth
- Use Tenaculum or other forceps
- Finger sweep **be careful!**
- Head down – shake & Chest-abdominal compressions



□ REVIEW – Questions

What is the most important in terms of assessment?

STAYING SAFE – Survey the scene!

□ REVIEW – Questions

What is the most important in terms of assessment?

STAYING SAFE – Survey the scene!

If the pet is suddenly having difficulty in breathing when you are feeding him what should you do?

Give him a Heimlich like maneuver

BLOCKED AIRWAYS THAT CAN'T BE CLEARED

Causes = hematomas, swellings, tongue injury

Rodenticide toxicity, allergic bee sting

Medics give Blow-by O2, - anesthetize = Intubate

– possibly do a cricothyroid or trach opening

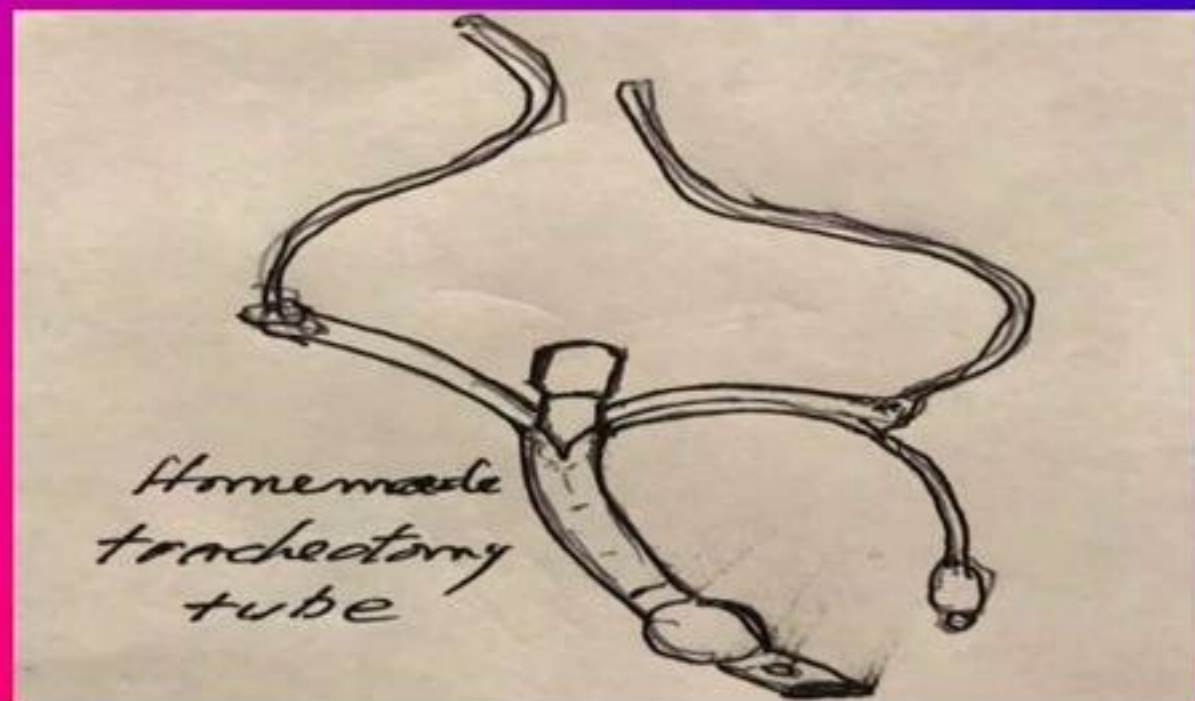
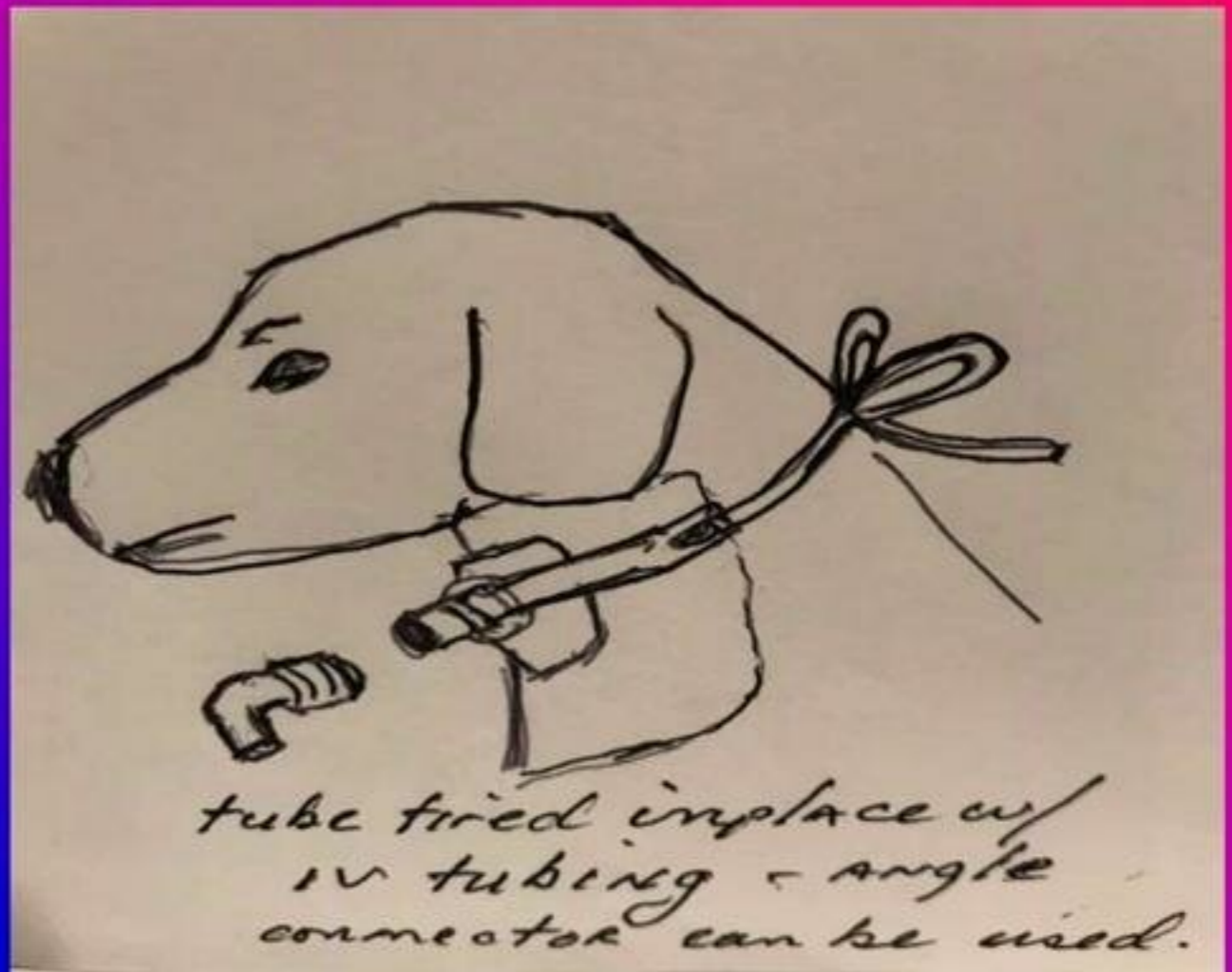
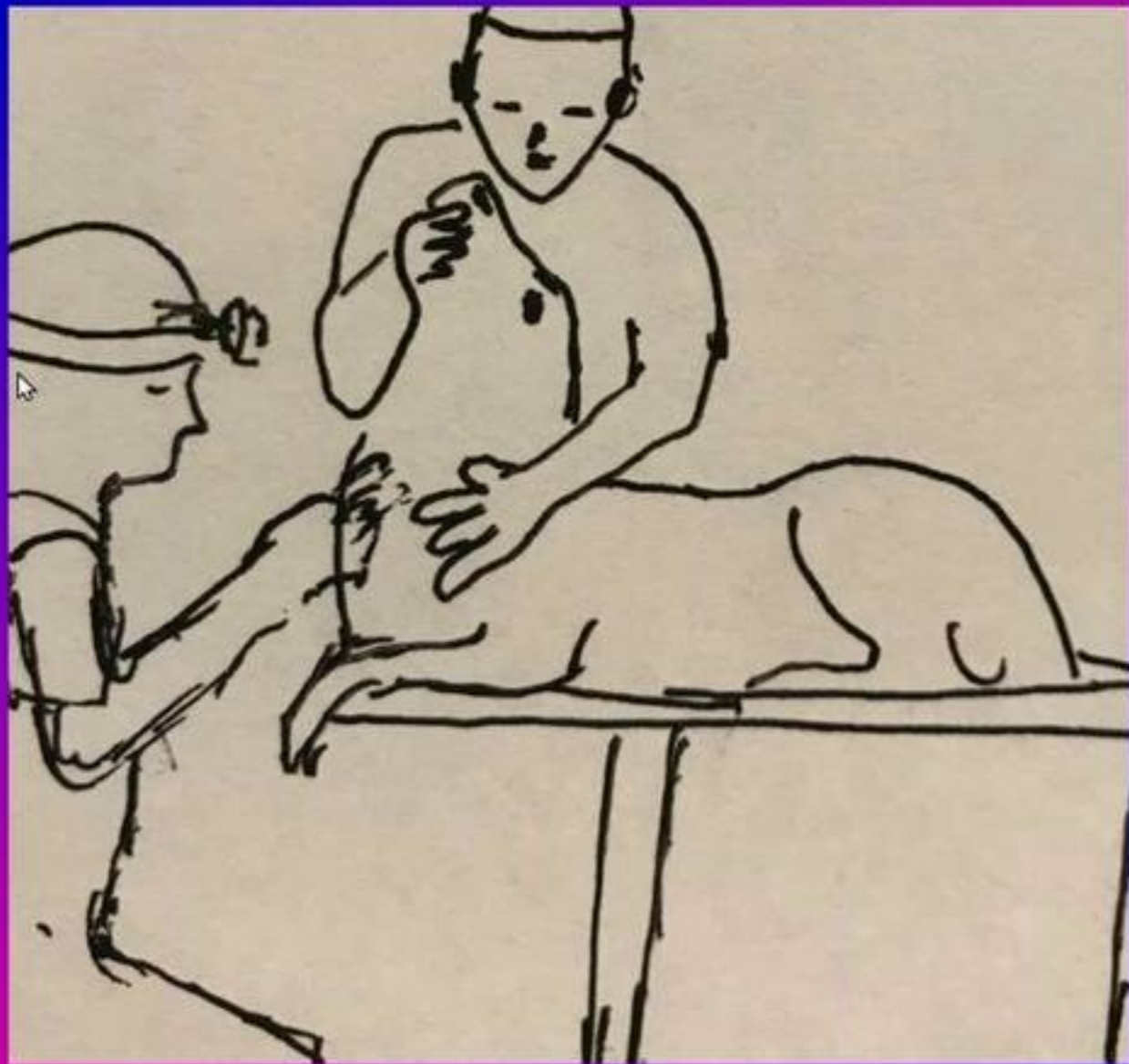
Pet Owners, Boy Scouts = never let skin come

between you an airway



Tracheotomy





SECONDS.....AIRWAY, BREATHING





TRACHEA - LARYNX - PALATE

□ PENETRATING INJURY

- STICKS - DON'T THROW LONG ONES EVER!
- GSW - STAB - BITE WOUNDS

□ LARYNGEAL PARALYSIS

- GRADUAL ONSET
- NOISY BREATHING - INSPIRATION

□ LARYNGOSPASM - BLUNT TRAUMA

□ ELONGATED SOFT PALATE - SNOR

Breathing

Is the pet breathing? LOOK, LISTEN, FEEL

What is the **color** of the oral mucous membranes?

Is there evidence of thoracic injury or penetration?

If not breathing *pull tongue forward and close front (incisor) teeth on the tongue* = this prevents tongue blocking the larynx and helps seal the mouth.

NOT Breathing and Unconscious

Provide mouth to mouth & nose ventilation.

Or use A CONE MASK = safer and more effective
= watch for chest rise and feel the air going into
lungs. If not observed = reposition the head and
neck (make sure extended!) THIS WILL WORK

May have to pull tongue forward and wipe out
mouth (make sure is fully unconscious)

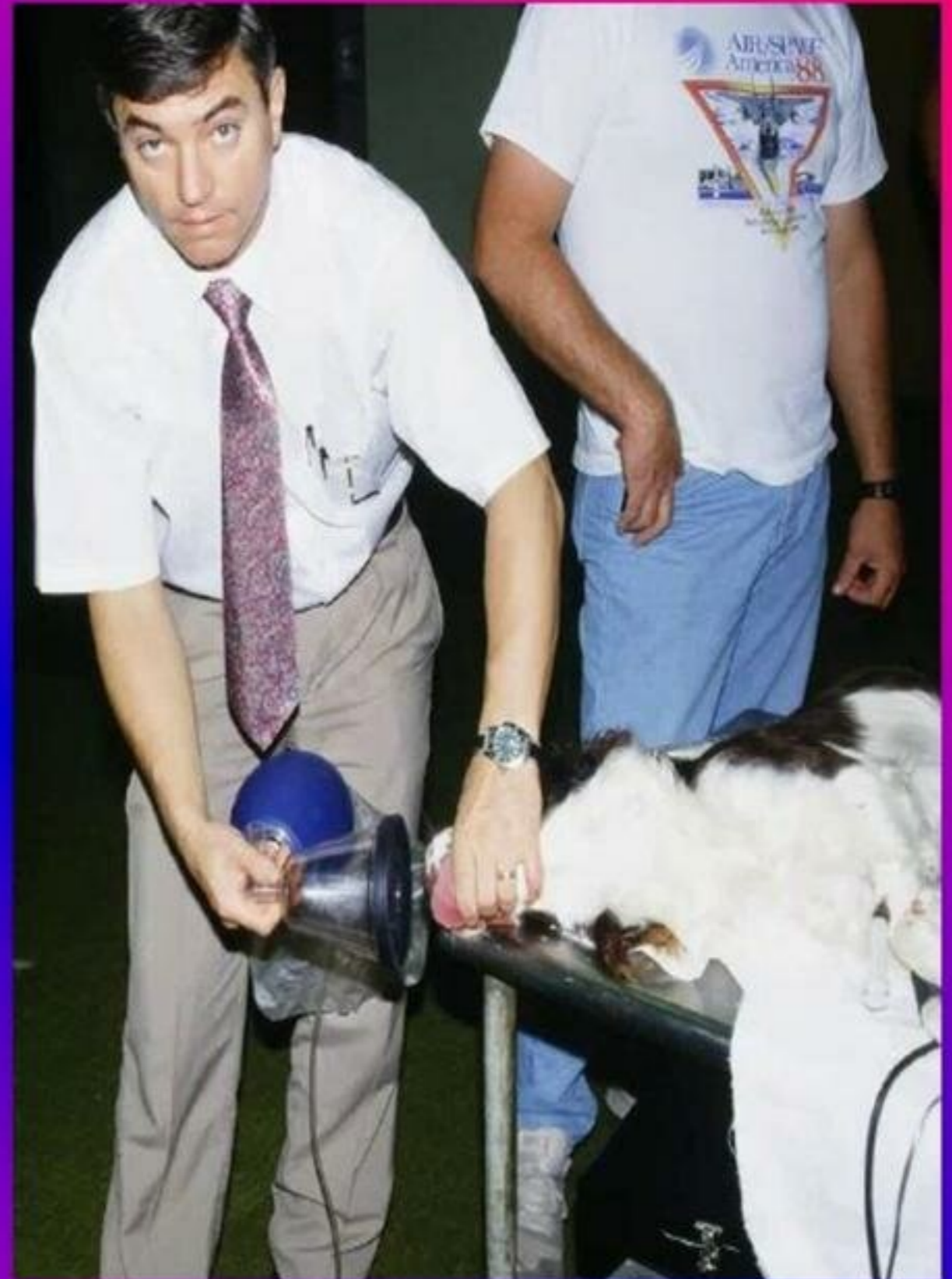


Rescue breaths

Can do also on pets that just are too tired to keep breathing....

These pets will be possibly awake... *just help them take their next breath. Must use a mask*

Do not force air in too hard.





Circulation

Check for a pulse at Femoral artery

Or listen for heartbeat - or palpate for a heartbeat – IF NOT SURE START CPR

If heart is beating but no breathing continue support breathing with mask and mouth or with your mouth on pet's nose

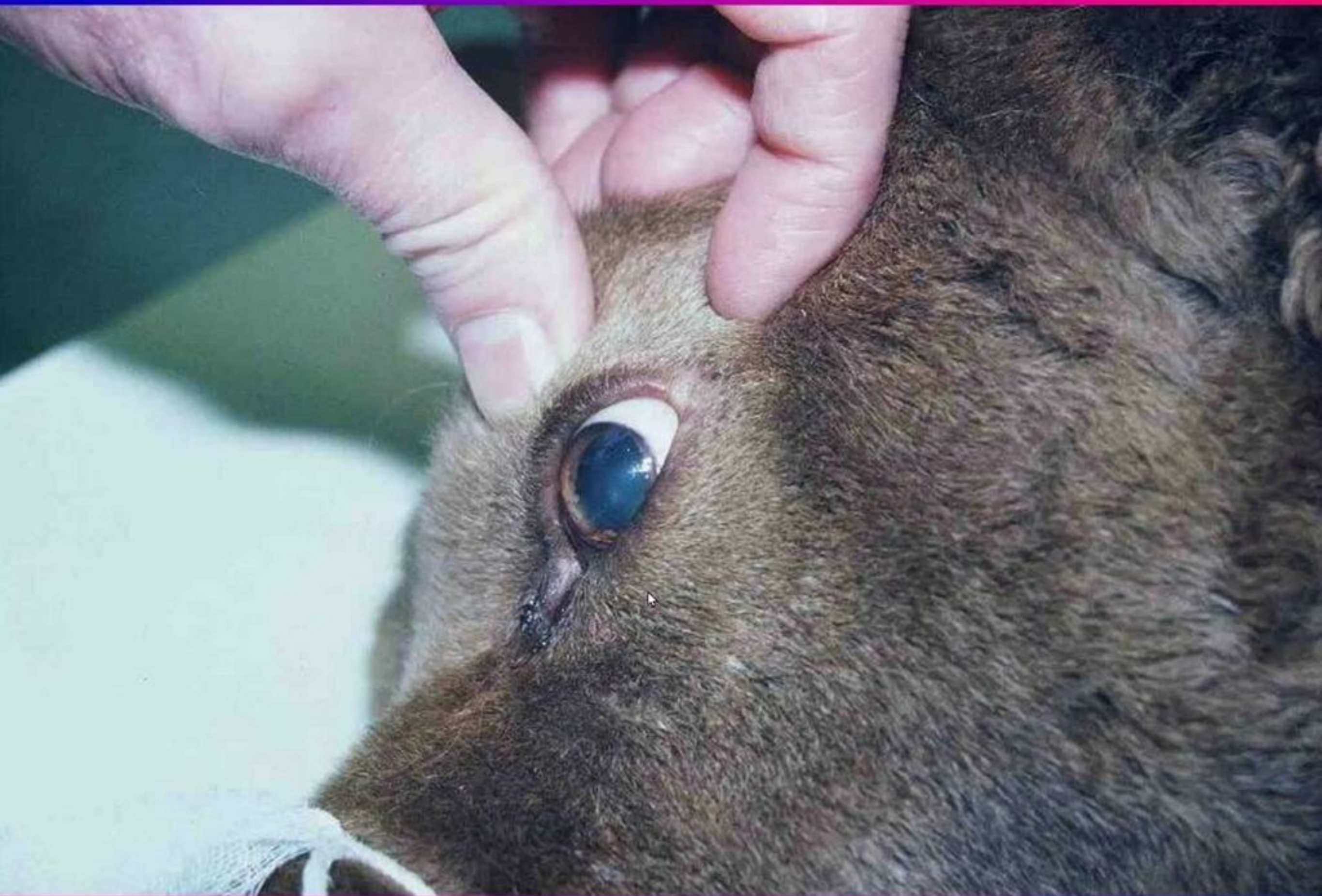
Special Equipment: Ultrasonic Doppler Flow Detector will DEMO this

- ❑ Parks Medical Electronics 1-800-547-6427
- ❑ Model 811-B w/ accessories \$850.00
- ❑ Vet Dop, DVM Solutions 1- 210-373-9627



Doppler Arterial Blood Flow and Pressure





CPR - Reason I most often start with rescue breathing after opening the airway is in most pets (in my experience) the most causes of cardiac arrest are associated with airway or ventilation problems that can be reversed and are not heart related like in adult humans



RESUSCITATION



If unconscious – AND MAKE SURE OF THIS

Open airway and check for foreign bodies - OPEN MOUTH, EXTEND HEAD, PULL TONGUE FORWARD, LISTEN FOR BREATH SOUNDS – CHEST RISE

If not breathing - begin rescue breathing

Again make sure pet is unresponsive first

Mouth to Nose = PULL TONGUE OUT – CLOSE ON IT TO FORM A TIGHT SEAL, BLOW INTO NOSE, HOLD LIPS SHUT, GIVE BREATH, SEE CHEST RISE....

If no pulses or heartbeat - begin CPR **DEMOS**