Veterinary Analysis of Video Evidence: The Important Role of the Veterinarian

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Purpose of Analysis

Discuss with prosecutor, investigator
Provide context, what happened, where animal injured,
Determine if separate events

Additional evidence
Visual evidence of pain, injury, suffering
Can prove case without a body

Veterinary assessment critical, regardless of who has reviewed

Considerations

Type of video program: may open with different ones; some allow changing speed control, screen capture
May watch first without sound
Take notes, document time on video of important findings, events
If see additional evidence, contact investigator

Considerations: Interview Videos

Note references to events
Any timelines
Description of events, animal
His/her explanations of what happened

State v. Wilson Longanecker Case

• Child pornography investigation
• Found photo and video evidence of torturing kittens
• No bodies
• Asked to review evidence for animal cruelty charges
• Analyzed to identify each animal: coat pattern, markings
**State v. Longanecker Case**

- Analyzed to determine separate events
- Behavioral and physical evidence of injury, suffering, facial pain expressions
- Kittens wet, disoriented, wobbly, weak
- "Bath time" photo series showed attempted drowning/partial asphyxia
- Objects/tape used to torture, partial asphyxia
- Blunt force trauma to some kittens
- Identified syringe and vial in videos/photos ("Kibbles on Acid")

**Pled Guilty:**

- 40 yrs
  - 42 counts of child pornography
  - Reduced to 4 counts of animal cruelty
  - 1 count of obstruction of justice

**Case: Dog shot by police**

- **Dog:** Tyson, a 5 year old Pitbull-type breed, M/N
- The owner of the dog was moving and her friend was keeping her dog at her house along with 2 other dogs – a Pitbull and a Chihuahua
- Friend called police because a man was at her door, intoxicated and had a gun
- Police respond and arrest him

**Police Shooting**

- The man was driving a stolen vehicle so they contacted the owner of the vehicle and remained at the residence waiting for the owner to arrive and take his vehicle
- Police were in front of the house and had already searched the back yard when first arrived
- Police knew there were dogs inside the house

**Police Shooting**

- After a period of time, the friend, who is owner of the house, came out to the front to ask the police if she could let the dogs out in the back yard
- Twice she was told "no" and then eventually was told she could let her dogs out in the back yard
- Unknown to the front officers, two other officers had gone into the back yard
Police Shooting

The two officers fired at all 3 dogs, hitting the 2 Pitbulls.
Both dogs ran from the back yard, through the open gate, to the front yard and street.
Tyson lay down by a car next to the driveway and eventually died.
The other dog ran off then came back and eventually died in yard across the stress.

Background

- In the state where this happened, police are required to take training on how to avoid shooting dogs and how to handle situations of dangerous dogs.
- This includes alternate use of Taser, pepper spray or batons.
- Have to consider endangering others when shoot at a dog.

Issues for the Case:

- Police officer gave permission to let the dogs out in the back yard.
- Police officers claimed the dogs were coming at them when they shot them – attacking.
- Police justified use of deadly force.
- One fired 9mm Glock and one fired 40 Glock.
- Owner wanted to file a civil suit and requested a necropsy.
- Other dog – no necropsy performed; had abdominal gunshot wound per officers.

Surveillance cameras at the front of the house

- Video 1 - 4:42:30
  - Gunshots 45 seconds after owner comes in house.
- Video 2 - 4:43:15
  - Note: Tyson has reflective harness on.
  - Breathing movement until 4:48:05 (end of video).
- Video 3 - 4:50:03
**ANALYSIS REPORT: Video CH01-2016-10-12-04-42-03**

- Police officer standing in driveway reacts presumably to gunshots at 04:43:15, and runs toward the right side of the house.
- The two dogs (Tyson and a black and white Pitbull type) run across the front of the house along the sidewalk 04:43:23, down the driveway and around a parked vehicle to the left. They run away from the first officer and a second approaching officer in the front of the house and road.

**Video CH01-2016-10-12-04-48-37:**

- Tyson is bleeding from the left hind leg, flinging leg out while running. Blood stains seen along the sidewalk, driveway and road.
- Tyson comes back around the car and peers around the front bumper, then limps to the right side of the car, turns around and lays down next to the curb at 04:43:58. His chest harness can be seen and appears to be reflective. This harness can be seen moving in the video, consistent with breathing, until the video darkens at 04:48:05, indicating he was alive.

**Crime Scene Photos**

- Taken by police that night and later by Tyson’s owner
- Bullet holes in wooden fence, back of house in the brick
- Blood stains at back door and along right corner of house

**Video CH02-2016-10-12-04-37-12:**

- Woman seen leaving front door toward front yard. She comes back to front door and enters at 04:42:30 (Gunshots from other video 45 seconds later).
- The black and white Pitbull runs by along front sidewalk. No bleeding from this dog is seen.
- Then Tyson follows, runs by along front sidewalk heavily bleeding from leg.
**Blood Stain Analysis**

<table>
<thead>
<tr>
<th><strong>Video</strong></th>
<th>Video: no blood seen coming from black and white Pitbull</th>
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</thead>
<tbody>
<tr>
<td><strong>Blood</strong></td>
<td>Heavy blood spurts when Tyson running and moves leg out to the left side</td>
</tr>
<tr>
<td><strong>Blood</strong></td>
<td>Blood stains at back door: high velocity spatter that changes to arterial pattern moving to the right of the house – the same pathway the dogs ran to escape the back yard</td>
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</tbody>
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**Analysis: Dogs’ Behavior**

- Instinctive to move away from danger and to the closest safe area – the back door
- Back door is closed so they move to the side gate and run out the yard
- They do not run away from home – just away from ‘danger’ and stay by car
- Black and white dog runs further away but immediately comes back to yard across the street
- Never went after the police officer in the front of the house

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**Necropsy: Questions to Answer for the Case**

- Was Tyson moving to attack police officers? Trajectory determination will provide answer
- Do injuries support blood stain patterns seen on photos and video?
- What type of gun was used? Will tell which officer shot him. Size of entrance wound will provide answer

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**Necropsy Findings**

- Radiographs: comminuted fracture of midshaft left femur; no projectile in body
- Distant gunshot wound to left upper lateral thigh
- Entrance wound 9mm
- Massive hemorrhage around fracture site in area of femoral artery; femoral artery macerated

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**Necropsy Findings**

- Exit wound 2cm diameter
- Contusions around left prepuce with multiple small irregular skin lacerations consistent with impact of flattened bullet
- Large amount of hemorrhage around the left penis
Found near the back door

Ejected Bullet Casing

Shot from above and behind

He was facing away from the shooter

Trajectory
Injuries and Blood Stain Patterns

- Blood stain patterns at back door: high velocity impact, not arterial
- Arterial starts immediately to right of back door
- Consistent with either:
  - Was shot while at the back door, facing away from shooter
  - Initial femur fracture had not lacerated femoral artery but Tyson’s movement caused it to lacerate
- Blood stains at front of house consistent with arterial pattern

Survival Period and Time of Death

- Dog’s circulating blood volume 85ml/kg
- Based on Tyson’s weight, this calculates to approximately 7.5-10 minutes to bleed out

Survival Period and Time of Death

- When blood loss is greater than 40% it becomes life threatening and death will result without treatment
- He would have lost 40% of his circulating blood volume in 3-4 minutes
- On video, movement seen for 7 minutes, death within 2-3 minutes after

Final Police Issue

- On video – none of the officers rendered aide to either dog
- Tyson – based on the Survival Period: may have lived if they had compressed wound and rushed to emergency veterinary hospital 5 miles away
- Police training on handling dogs does not include basic emergency care for the dogs they shoot