

WOUND CASES and THEIR MANAGEMENT

Al Flint DVM, PhD
Montana Equine
4/4/2009

Case 1

- 4 year old
- Quarter Horse Gelding
- Presented 11/22/08
- Multiple lacerations
- 4 hours post injury

Initial Evaluation



Initial Evaluation

- Potentially involved structures?
 - Tendon Sheath
 - Pastern Joint
 - Coffin Joint
- Tenocentesis
- Arthrocentesis

Initial Treatment

Primary Closure

- Tension relieving suture pattern
- Skin apposition
- Minimize dead space

● Wound Stabilization

- Reduce tension and motion
- Moist wound environment



Follow-up

- 12/4/08 Cast removal



Follow-up

● Leg Wrap

- Support wound
- Moist healing environment



Follow-up

● 12/19/08



Follow-up



Follow-up



Follow-up

- ◉ Remove excessive granulation tissue
- ◉ Low limb wrap
- ◉ Discussed shoeing

Follow-up

● 1/8/09



Follow-up



Follow-up

● 2/19/09



Follow-up



Follow-up

- ◉ Trimming
- ◉ Light Bandage
- ◉ Back to Light Work

Deep Structures

- Synovial Structures



Deep Structures



Deep Structures



Deep Structures



Synovial Evaluation

- White Cell Count

- >30,000 WBCs
 - 95% Neutrophils

- Total Protein

- >4.0

- Glucose

- Lower than peripheral blood glucose

- Lactate

- Higher than peripheral blood lactate

Treatment

- ◉ Dilute the Pollution
- ◉ Antibiotics
 - Systemic
 - Regional perfusion
 - Intra-synovial

Prognosis

- ◉ Duration of Wound
- ◉ Response to Initial Therapy
- ◉ Post Injury Considerations

Deep Structures



Deep Structures



Case 2

- 2 year old
- Quarter Horse Stallion
- Presentation 2/2/09
- 12 hours post Injury

Initial Evaluation

- Potentially Involved Structures
 - Fetlock
 - 3rd Metatarsal Bone
 - Extensor Tendon
- Arthrocentesis
- Radiographs

Radiographs

● 2/19/09



Initial Therapy

- Primary Closure
 - Tension relieving sutures
 - Stents
- Leg wrap
- Antibiotics
- NSAIDS

Follow-up

● 2/19/09



Follow-up

- Leg Wrap

- Wound Stability
 - Kimzey Splint
 - Bandage Cast

- Promote Granulation Tissue



Follow-up



Follow-up

● 2/23/09



Follow-up

● 3/3/09



Follow-up

● 3/12/09



Sequestrum

- Devitalized Bone

- 10-14d radiographically visible
- Chronic non-granulating wounds

- Debride

- Surgical

- Continue Follow-up Bandaging

Follow-up

- 3-25-09 granulation tissue closed to the size of a quarter.

Bandaging

● Moist wounds

- 1962 occluded wound - 2x faster healing
- Allows neutrophils to do job
- Wound exudate not lost
 - Provides growth factors

● Exposed wounds

- Irritation
- Scar more

Bandaging

- Wound movement
 - Promotes granulation tissue
 - Destabilizes epithelium
- Gross contamination



Wound Stability



Proud Flesh



Proud Flesh



Case 3

- 12 year old
- Paint Mare
- Presented 2/21/09
- Wound 4-6 hours old

Initial Evaluation



Initial Evaluation

- Potentially involved structures?
 - Carpal Joint
- Arthrocentesis

Treatment



Follow-up

- Full limb Bandage
- Antibiotics
- NSAIDS
- Remove Sutures in 10-14d

Follow-up

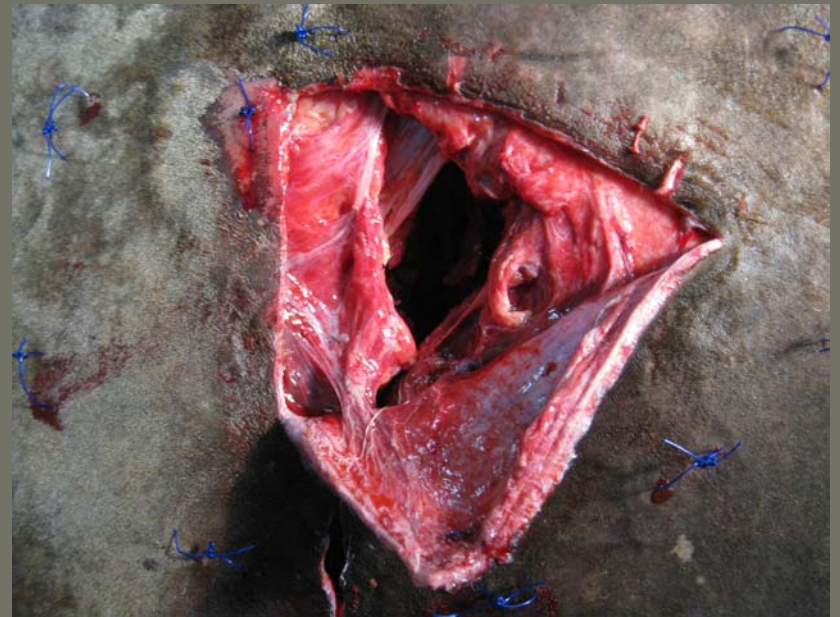
● 3/24/09



Case 4

- 4 year old
- Quarter Horse Mare
- Presented 6/11/08
- 4-6 hours post injury

Initial Evaluation



Initial Evaluation

- Deep Structures
 - Abdominal cavity
- Laparoscopy
 - Intact peritoneum
- Abdominocentesis
 - WNL

Treatment



Follow-up

- Pack and Bandage Change
 - 5 days
- Closure
 - Delayed primary

