



Case Report: The Jones Sulik Story

PBM Therapy in Necrotic Wounds



Approximately 2 year old
hound – intact male

Presented to emergency
clinic for multiple necrotic
bite wounds, 5-7 days
previously, on 3 limbs

Anorectic
Dehydrated
Non-ambulatory

Submitted by Gloria Verrecchio, DVM, CERP

Penridge Veterinary Service, LLC www.gloriaverrecchioldvm.com



Multi Radiance ActiVet Pro™ complements medical/surgical treatment
provided by owner, Kelly Sulik, DVM
Animobile Mobile Veterinary Clinic PLLC

Treatment during Jones' recovery
included:

- Multi-modal pain control: Fentanyl patch, carprofen (Nsaid), gabapentin, tramadol, sedation/anesthesia during bandage changes
- Antibiotics, as indicated by culture/sensitivity: amoxicillin-clavulanate, marbofloxacin, chloramphenicol, cephalexin
- Hyperbaric chamber: once before and once after amputation surgery
- Daily wound care: debridement, cleaning, appropriate bandaging, physical therapy

Laser settings (Treatment time and Hz setting varied, based upon wound presentation the day treated.):

- 1000 Hz Spinal Unwind
- 50 Hz Photohemotherapy
- 100% power in Blue Mode
- 1-250 Hz Tissue repair
- 1000-3000 Hz Reduce swelling
- Dome and utility probes

Right rear necrotic wound –
Day 0 to Day 3

MRM ActiVet Pro™
Day 3 – Laser treatment #1

Right rear Day 0 (intake)



Day 2 after debridement



Day 3 after further
debridement



Increased blood flow after
50hz PHT over femoral
artery for 5 minutes





Day 4 - Laser treatment #2

- 16 hours after first treatment
- E-collar overnight, started chewing bandages
- Gut sounds present
- Toes cold on right rear, others normal

Day 5 - Jones' wounds after 1st Hyperbaric Treatment



Left front
craniolateral



Left rear
caudal



Left elbow
medial

Right rear -
toes cold
no deep pain





Day 5 Post Op



- Plasma during surgery
- Pre Op PCV 30%, Post Op 17%
- Central line placed for transfusion of packed red cells.
- Nasogastric feeding tube placed
- Fentanyl patch
- No laser treatment today

Day 6



- PCV 25%, giving kisses and eating
- Remaining wounds sloughed more tissue, remaining appears healthy with bleeding edges
- No laser treatment today



Day 7 – Laser treatment #3



- E-collar
- Eating on his own
- Some swelling & heat over amputation site

Day 8 - 3 days post amputation – Assessment and treatment



- Abscess formed at amputation site, drained, flushed and penrose drain placed
- Bloodwork shows high white count
- Anorexia
- Further skin and fascia tissue loss - elbow and left rear
- Gastrocnemius muscle attachment to Achilles tendon in left rear ruptured

Day 8 – Assessment – Laser treatment #4



- Right rear bruising, swelling at surgical site
- Scrotal swelling
- Painful



- Left elbow – skin loss results in 'baggy' edges and potential space
- Some necrosis remaining on deep fascia of the olecranon

Jones' Attitude



- Day 12 – Photo taken prior to laser treatment #6
- 7 days Post Op
- 5 laser treatments
- *Walking with a harness and sling*



Left Rear Wound Healing Progress



Day 9 Laser #5



*Day 12 Laser #6

Day 14 Laser #7



*Day 16 Laser #8

Day 18 Laser #9



Day 21 Laser #10



Day 24 Laser #11



*Day 27 Laser #12



Day 28



*Day 29 Laser #13

*Day 32 Laser #14

Day 35 Laser #15

Day 39 –
(15 laser treatments)
Wound Healed



Left Front – Craniolateral Wound Healing Progress



Day 14 –
after 6 laser
treatments



Day 21 –
after 9 laser
treatments



Day 28 –
after 12 laser
treatments



Day 35 -
14 laser treatments
Wound Healed

Jones' Attitude



Day 22 –
10 laser treatments
19 Days Post Op





Left Elbow – healing without skin grafts to Day 58



Day 14 –
6 laser treatments



Day 42 –
15 laser treatments



Day 21 –
9 laser treatments



Day 49 –
16 laser treatments



Day 28 –
12 laser treatments



Day 58 –
18 laser
treatments



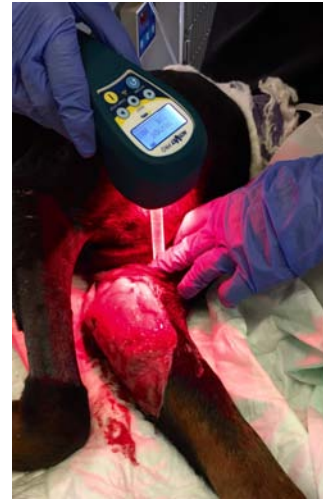
Day 35 –
14 laser treatments



Hurdles to healing

The other wounds healed by Day 39 and the elbow is very nearly healed at Day 58.

- Healthy skin needs to adhere to granulation tissue before epithelial migration can occur.
- Difficult to stabilize tissues for adherence due to Jones' activity and limb bandage had to be secured over this area.
- As the skin was sutured to close the potential space proximal to the elbow, the distance between the body and proximal wound margin increased. Bandages and motion no longer prevented skin adherence to the fascia below.(Day 30)
- Cellular migration starts about day 36. (Note scar length)



Day 30 < 1cm of skin left to adhere

PHT with utility probe, too little skin remained to allow use of dome. Weak pulse barely felt, becomes strong during PHT.



Note scar length from body to olecranon



100% power Blue Mode Utility probe between Muscles. Dome for scanning over granulation tissue.

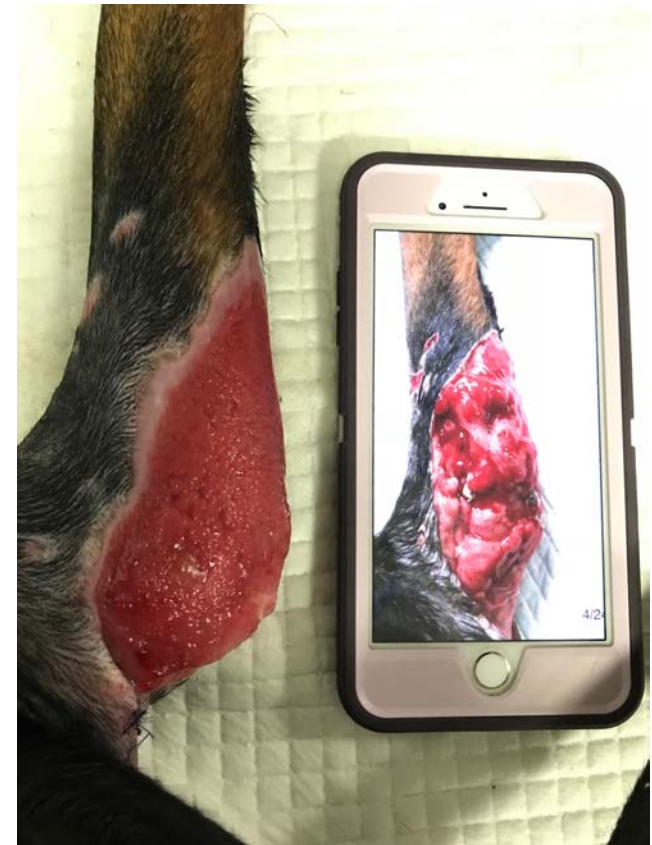


Other hurdles to healing

Other Hurdles:

- Exposed flesh increased:
 - Risks of infection
 - Loss of extra cellular proteins in serum
 - Immune system stress
 - Need for energy to replace rapid turn over of white cells
- Debilitation (BCS 2/9) and muscle wasting from negative energy balance
 - Healing multiple open wounds takes a large amount of energy

Jones is eating 4 to 5 times each day to maintain healing and weight gain. Now BCS 4.5/9



24 days apart
Day 31 compared to Day 7



Addendum:

Jones' story of recovery and rehabilitation, at this writing, is still in progress. The ActiVet Pro™ laser treatments are making his ordeal less painful and appreciatively shorter than anticipated at the outset.

We are hopeful his successful transformation from near death, to a dog happily licking at raindrops, will give hope to other veterinarians and owners who may believe euthanasia is the only option.

Thank you for listening.

Gloria Verrecchio, DVM
Kelly Sulik, DVM

