

Case studies EquCell®



Cold plasma therapy in equine practice



ActivCell
Group

www.activcellgroup.com

Case studies

Content

Sweet itch (anti itching effect)	3
Chronic dermatitis (idiopathic)	3
Bursitis praecarpalis in warmblood stallion	4
Carpus wound	5
Multiple skin wounds	6
Carpus injury: Rehab therapy	7
Desmitis of the suspensory ligament	7
Dermatitis saddle area	8
Hock joint injury	9
Purulent bursitis of hock joint in foal	10
Septic bursitis subcutanea and subtendinea calcanea	11
Abscess on tubular bone	12
Malanders	13
Chronic malanders in Friesian horse	13
Malanders (caused by vasculitis)	14
Hematoma/Seroma	14

Case studies

Sweet itch (anti itching effect)

Example of owner therapy

Diagnosis

- Sweet itch (anti itching effect)

Therapy management

- EquCellpen® 2–3× weekly
- Glass electrode: Disc
- Pulse frequency: 100 Hz
- Amplitude: 6–9

Result

- Itching immediately reduced
- Success after 5 weeks: Hair grows back



Before



After

Chronic dermatitis (idiopathic)

Diagnosis

- Biopsy: Chronic dermatitis, idiopathic

Therapy management

- EquCellpen® 3× weekly, 10 min
- Glass electrode: Straight
- Pulse frequency: 80 Hz
- Amplitude: 6

Result

- Immediate reduction of itching
- Success after 4 weeks: Healing



Before



After

Case studies

Bursitis praecarpalis in warmblood stallion

PhD, Dr. med. vet. Verena Bracher,
Tierklinik Leimental, Veterinary Advisory
Board ActivCell Group

History

- Chronic bursitis for 3 months
- Cortisone injection was suggested

Therapy management

- Therapy with EquiCellpen® 2× weekly, 15 – 20 min
- Treatment by owner according to the instructions of the veterinarian
- Glass electrode: Straight
- Pulse frequency: 20 – 40 Hz
- Amplitude: Gradually increased from 2 to 8
- Specific padding in the box (hay rack)

Result

- Signs of regression after first treatment
- Marked regression after 3 treatments
- Healing takes place after 1 month upon review
- Treatment continued once a week for 2 months as prophylaxis against recurrence



Before



After



After

Case studies

Carpus wound

Dr. med. vet. Fabienne Wiese
Tierarztpraxis Wiese, Malters

History

- Irish, Mare, 20yrs
- Fall on carpal joint
- Primary wound closure with drainage, suture dehiscence after 5 days
- Daily wound cleaning, 2× weekly laser shower and acupuncture
- After 1 month of initiation with EquCellpen® as sole therapy

Therapy management

- EquCellpen® for 6 months 3× weekly, then 2 months 2× weekly and 1 month 1× weekly, 5 – 10 min
- Treatment initially by the veterinarian, then by the owner
- Glass electrode: Disc
- Pulse frequency: 80 Hz
- Amplitude: 5 – 9

Result

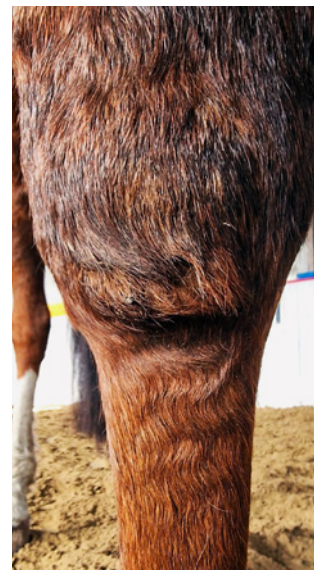
- Success after 9 months: Wound completely closed



After suture dehiscence



Incipient healing



Completely healed

Case studies

Multiple skin wounds

Dr. med. vet. Christina Köstli-Felber and
med. vet. Tanya Rhiner, Tierklinik Lindenhof,
Oberegg-Muolen

History

- Mini Shetland Pony, Mare, 12 yrs
- Multiple skin wounds on the limbs after jumping from a moving horse trailer
- Initially, wound cleaning and dressings, flunixinum, trimetoprim-sulfadimidine, and nystatin-neomycin-sulfate-thiostrepton-triamcinolone-skin ointment
- Started EquCellpen® therapy after 3 weeks

Therapy management

- EquCellpen® 2× weekly for 1 week, 12 – 15 min
- Glass electrode: Curved and disc
- Pulse frequency: 100 Hz
- Amplitude: 9
- Nystatin-neomycin-sulfate-thiostrepton-triamcinolone-skin ointment

Result

- Completely healed about 6 weeks after accident



Front left before



Front right before



Front left after



Front right after

Case studies

Carpus injury: Rehab therapy

History

- Carpus trauma, extensor injury, post-OP
- Carpus flexion reduced to 20 degrees

Therapy management

- EquCellpen® 1× weekly, 15 min
- Glass electrode: Straight
- Pulse frequency: 50 Hz
- Amplitude: 6 – 9

Result

- Success after 8 weeks: Normal mobility regained



Before



After

Desmitis of the suspensory ligament

Example of owner therapy

Diagnosis

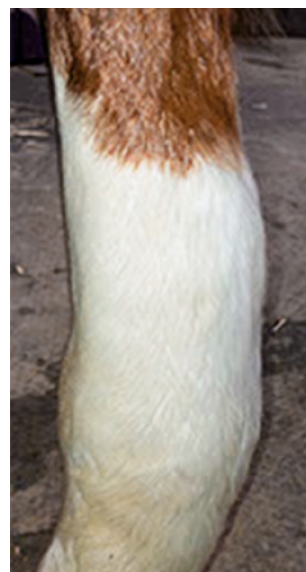
- Desmitis of the suspensory ligament

Therapy management

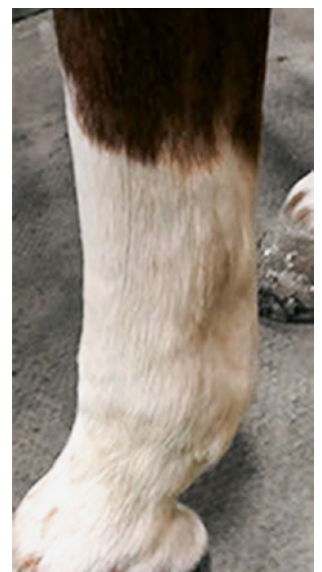
- EquCellpen® 2 – 3× weekly, 5 – 10 min
- Glass electrode: Straight
- Pulse frequency: 40 Hz
- Amplitude: 6 – 8

Result

- Success after 6 weeks: Significant improvement



Before



After

Case studies

Dermatitis saddle area

Example of owner therapy

History

- Freiburger x Warmblood, Mare, 11 yrs
- Lesions in saddle position for 7 yrs, leukotrichia, skin plaque-like thickened, crusts
- Various pre-treatments
- Recent Reports:

Bacteriology: +++ Acinetobacter calcoaceticus with antibiogram, Candida albicans and mixed flora

Cytology: Neutrophilic inflammation and bacterial overgrowth, diagnosis: Bacterial folliculitis or furunculosis possible, biopsy recommended

Histology:

1. Loss of melanin pigment in the bulb of hair follicles (one sample)
2. Dermatitis mild, perivascular to interstitial, lymphocytic, sometimes with lamellar, orthokeratotic hyperkeratosis, serocellular crusts with few coccoid bacteria, hidradenitis, luminal folliculitis, and mild to moderate, multifocal, dermal edema (all samples). Unfortunately, it is not possible to make a specific diagnosis. The described inflammatory changes are mild and non-specific. Histologically, there are no clear findings for dermatophilosis

Therapy management

- EquCellpen® as sole therapy 3× weekly for 8 weeks, 15 min
- Glass electrode: Curved and disc
- Pulse frequency: 100 Hz
- Amplitude: 6–9

Result

- Healed after 8 weeks



Before



During EquCellpen® Therapy



After

Case studies

Hock joint injury

Example of owner therapy

History

- Show jumper, mare, 7 yrs
- 1,5 years ago injured in the walker at the hock joint, sutured several times and opened up again, even secondarily no complete wound healing occurred
- 3× phlegmon since the accident
- Prognosis questionable, sports use not possible at the moment

Therapy management

- Therapy with EquCellpen® as a last resort
- 3× weekly for 3 weeks, 10 min
- Glass electrode: Disc
- Pulse frequency: 100 Hz
- Amplitude: 8

Result

- Complete healing after 3 weeks
- A short time later, sports action again



Before



Before



After

Case studies

Purulent bursitis of hock joint in foal

PhD, Dr. med. vet. Verena Bracher,
Tierklinik Leimental, Veterinary Advisory
Board ActivCell Group

History

- Foal, 4 months of age, operated on twice for purulent bursitis on the hock joint
- Accrued expenses: CHF 7000
- Prognosis poor, euthanasia pending

Therapy management

- Therapy with EquCellpen® as a last resort 3× weekly
- Treatment by owner following training by veterinarian
- Glass electrode: Disc
- Pulse frequency: 100 Hz
- Amplitude: 9

Result

- Control after 2 months of therapy
- Healing of the causative bursitis occurs
- Epitheliation not yet complete
- Complete healing only a matter of time



Before



Before



After

Case studies

Septic bursitis subcutanea and subtendinea calcanea

Example of owner therapy

History

- Trakehner, mare, 3 yrs
- Injury due to fall: Septic bursitis subcutanea and subtendinea calcanea, as well as lesion of the tendo musculi gastrocnemii to about one third posterior right
- Operation and splint dressing
- After 2,5 month of initiation with EquCellpen® as sole therapy

Therapy management

- EquCellpen® 2 – 3× weekly for 4 weeks
- Glass electrode: Comb
- Pulse frequency: 50 Hz
- Amplitude: 8

Result

- Swelling of the surgical suture and gastrocnemius tendon significantly less
- Joint mobility significantly better



After

Case studies

Abscess on tubular bone

Example of owner therapy

History

- Irish, gelding, 13 yrs
- Kick injury to the posterior left tubular bone with abscess formation
- Surgical treatment with drainage and dressings
- Wound healing disorder
- After 5 weeks of initiation with EquCellpen® as sole therapy

Therapy management

- EquCellpen® 1–3 × weekly for 9 weeks, 15 min
- Glass electrode: Curved and disc
- Pulse frequency: 100 Hz
- Amplitude: 6–9

Result

- After a few applications, the wound is significantly smaller and only superficial
- Complete healing only a matter of time



Before



After

Case studies

Malanders

Diagnosis

- Therapy resistant malanders

Therapy management

- EquCellpen® 1 × weekly
- Glass electrode: Disc
- Pulse frequency: 100 Hz
- Amplitude increasing

Result

- Success after 3,5 weeks: Significant improvement



Before



After

Chronic malanders in Friesian horse

PhD, Dr. med. vet. Verena Bracher,
Tierklinik Leimental, Veterinary Advisory
Board ActivCell Group

History

- Chronic malanders
- Therapy resistant

Therapy management

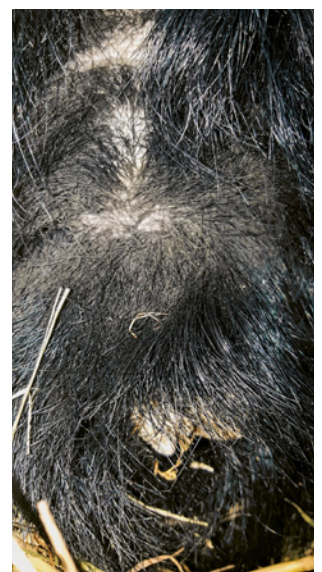
- Therapy with EquCellpen® 2× weekly
- Treatment by owner following training by veterinarian
- Glass electrode: Disc
- Pulse frequency: 80 Hz
- Amplitude: 5

Result

- Itching (stomping) reduces quickly
- Healing takes place after 1 month



Before



After

Case studies

Malanders (caused by vasculitis)

Diagnosis

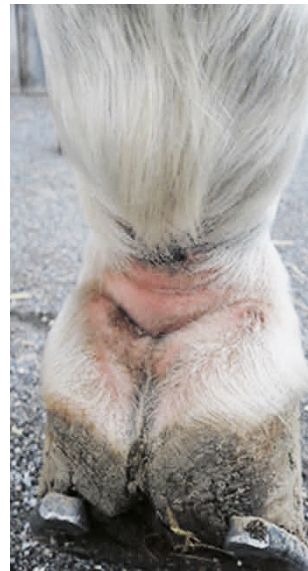
- Therapy resistant malanders

Therapy management

- EquCellpen® 2× weekly
- Glass electrode: Curved
- Pulse frequency: 80 Hz
- Amplitude: 6–8

Result

- Success after 3 weeks: Significant improvement, does not relapse



Before



After

Hematoma/Seroma

Diagnosis

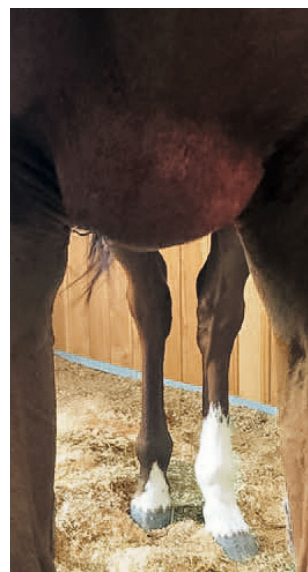
- Seroma 20 days old, stagnant circumference

Therapy management

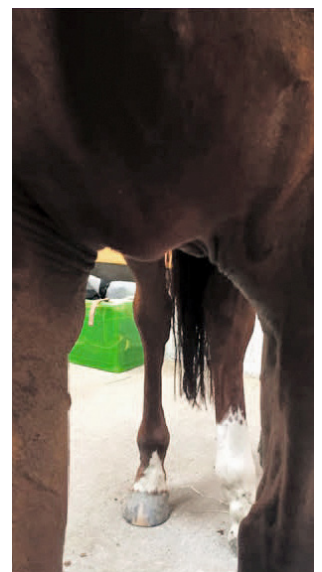
- EquCellpen® 2× weekly, 3–4 min
- Glass electrode: Straight
- Pulse frequency: 50 Hz
- Amplitude: 6

Result

- Success after 10 days: Significant reduction



Before



After

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