

# Ozone Therapy

## Practical Applications

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# How will medical ozone benefit my patients?

- Ozone therapy can benefit virtually every ill patient you see as an adjunct therapy
- Treatments are inexpensive and provide tangible results in the first few treatments
- Acute traumas heal faster with fewer medications
- Treatment option for chronic disease patients
- Provides anti-inflammatory and analgesic effect that clients appreciate



# How can a medical ozone unit benefit my practice?

- Cases that need ozone already exist in your practice
- Cost effective, high profit margin therapy that benefits your patients
- Easy to train your technical staff to carry out all treatments





Do you have these patients?  
Then you **NEED** ozone therapy!



# Hot Spot/Dermatitis Therapy

- “Hot Spots” are painful for the patient, and can be difficult to control.
- Therapy usually includes topical treatment of the wound as well as oral antibiotics.
- Using ozone during the initial treatment acts as an antimicrobial, brings down inflammation, and brings relief to the patient.
- No oral antibiotics were needed in this case. Initial ozone treatment was followed by every other day application for 3 treatments.



# Day One – Initial Presentation



Day 3



# Other Therapies for Dermatitis

- Ozonated oils applied at home by the owner
- Rectal Insufflation to act as anti-bacterial



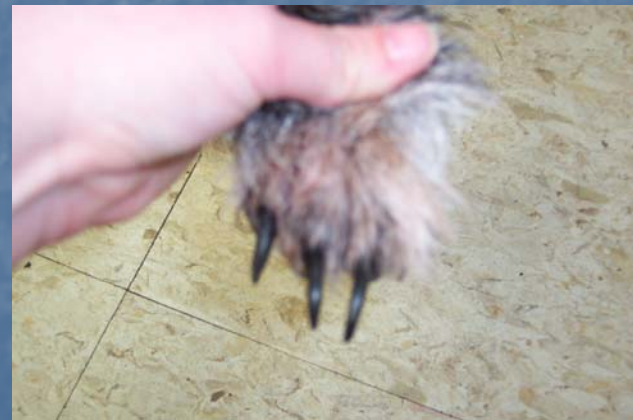
# Chronic Allergies and Ozone Therapy

- Provide instant analgesia and relief from itching
- Fights secondary bacterial and fungal infections
- The addition of haemotherapy balances immune function



# Severe Dermatitis with Edema

- Sissy had a 2 year history of severe, chronic dermatitis with thickened, swollen skin
- Sissy had been on antihistamine, steroid, and antibiotic therapy
- Sissy started haemotherapy treatments once a day for 3 days, then twice weekly





# Sissy after 3 weeks of ozone therapy...

- Sissy no longer scratches incessantly keeping her owners awake.
- Redness, inflammation and edema have resolved.
- Sissy takes only one 10 mg Benadryl a week, usually the day before she is due for her treatment!





# Severe Trauma and Wound Therapy



- Severe, non-healing wounds with massive infection present a huge challenge
- Ozone therapy fights infection, promotes healing, and minimizes the need for skin grafts and multiple surgeries

# After 2 ozone treatments post-surgery





# Day 10 of treatment





# Urinary Obstruction

- Once the obstructed cat was catheterized, ozonated fluids were used to flush the bladder to bring down inflammation and act as an antimicrobial.
- Follow up treatments of SQ ozone were done daily while hospitalized



# Non-Healing Wound Post Surgery

- "Runt" had surgical removal of a mammary tumor.
- Post surgery, she developed a non-healing wound.
- Due to complications during her initial procedure, the owners were reluctant to attempt anesthesia for a second procedure to close the wound.



# Chronic kidney patients and OZONE





# Day 1- Initial Presentation

- “Runt” was a poor surgical candidate due to cardiac issues.
- “Runt” had also shown a tendency toward GI upset with antibiotics
- The goal was treatment through good wound management



# Treatment Plan

- Clean and lavage with ozone fluids daily
- SQ ozone daily
- Daily bandage changes
- Good wound management at home



# Day 3 of Treatment



# Day 7 of Treatment





# Day 10 of Treatment



# Trauma Case

- Casper was transferred from the ER where he was treated for multiple lacerations and punctures due to a dog attack.
- Casper required extensive surgery to close the multiple wound sites
- The surgeons had concerns that he would develop necroses, requiring additional procedures.





# Treatment Plan

- Daily cleaning and lavage of all wound with ozone fluids
- Rectal insufflation of ozone daily in hospital
- SQ Ozone daily as outpatient
- Ozone flushes inside all drains daily
- Daily bandage changes, appropriate pain therapy



# Day 3





Day 7



Day 9





Day 12



# Haemotherapy

- Auto-haemotherapy is used to stimulate immune function.
- Applications include feline herpes virus, chronic allergies, immune mediated cancer, tick borne disease, chronic parasite or fungal infections, immune mediated anemia



# Minor Haemotherapy in Small Animal Practice



# IM Haemotherapy Injection





# Minor Haemotherapy and Chronic Feline Herpes Virus

- Minor haemotherapy provides a valuable treatment option with tangible patient benefits
- Clinical studies are showing that the treatments are effective in controlling symptoms in some case of feline herpes virus
- Treatment is inexpensive and easy to administer
- Dramatic results have been seen with as few as two treatments



# Chronic Kidney Disease



- Instead of SQ fluid therapy, give SQ OZONE FLUID THERAPY
- Provide your patient with valuable oxygen and immune support with fluid therapy.
- Takes no more time to administer while providing additional patient benefits



# Oncology and Ozone

- Cancer cells do poorly in the presence of oxygen
- Provides valuable anti-bacterial/anti-viral benefits
- Provides analgesia and anti-inflammatory action



# Cancer Patients receiving OZONE THERAPY





# Chronic Lyme Disease

- “Ian” is a six year old Bernese Mountain Dog with a 5 year history of Lyme Disease.
- Despite multiple courses of antibiotic therapy, C6 levels remain above 150 with intermittent clinical signs.
- Current therapy includes weekly haemotherapy, and twice weekly rectal insufflation.
- Recent C6 levels have fallen to below 60 with dramatic clinical improvement.



# Uterine Lavage

- Unspayed 4 year old DSH presented with high fever, anorexia, painful abdomen and purulent vaginal discharge
- Patient was not stable to bring to surgery due to severe dehydration





# Treatment Plan

- Three times daily uterine lavage with 20 CC ozone fluids
- SQ ozone twice daily
- IV fluid therapy
- Pain and antibiotic therapy
- Surgery when patient is stable

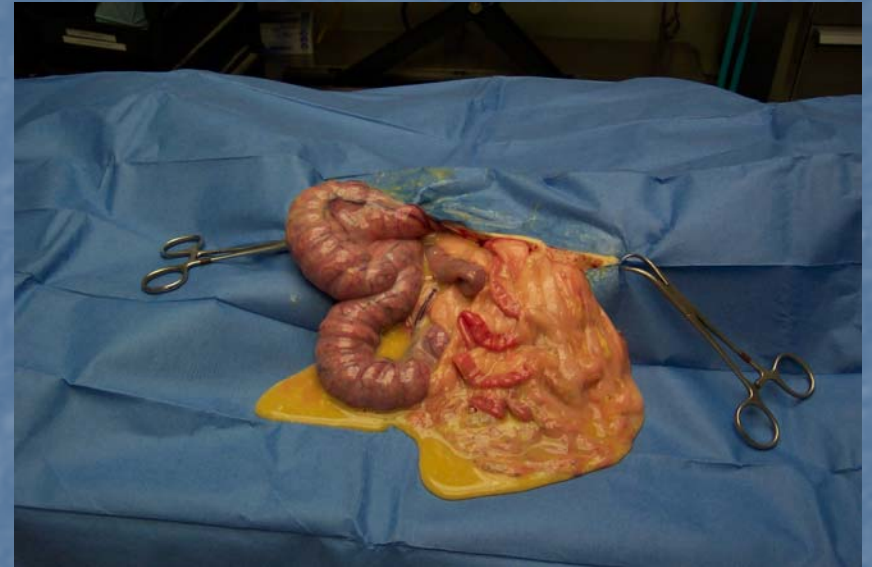








- Patient was stabilized
- Patient went to surgery on third day of treatment





# Osteosarcoma

- Tumor cells do poorly in the presence of ozone
- Ozone inhibits tumor growth while providing anti-inflammatory action, analgesia, and nourishes healthy tissues in the body



# 10 year old lab with Osteosarcoma

- Nigel was diagnosed in May of 2008
- Nigel began ozone therapy as an adjunct to his oncology treatment plan
- Treatments included daily rectal insufflation, bagging the affected limb, and SQ ozone therapy





- 9 months post diagnosis Nigel had an amputation of the affected limb
- Ozone was utilized post surgery as an antimicrobial, anti-inflammatory, and for analgesia



# Maintenance For Oncology Patients

- Nigel is now almost 2 years post diagnosis
- He receives rectal ozone 1-2 times per month as part of his ongoing treatment plan
- Nigel's current treatments include rectal ozone, nutrition therapy, and acupuncture





# Rectal Insufflation of Ozone

- Easy to carry out
- Ozone is directly absorbed by the rectal mucosa
- This capillary rich environment then carries oxygen to the rest of the body
- Can be carried out during a hypovolemic emergency to provide life saving oxygen to starving tissues



# Client Compliance with Ozone Therapy

- Client compliance is high due to the immediate sense of well-being that ozone provides to your patient.
- Treatments are reasonably priced due to the low-cost of generating ozone and ease of administration





# Clifford 7 y old Lab



# Skin Graft Needed?

- Clifford was hit and dragged by a truck
- A leg wound was failing to heal due to the need for a skin graft
- After 6 ozone treatments, significant granulation began to close the wound





# Wound Management

- As part of Clifford's outpatient care, his wounds were lavaged daily with Ozone, and he received SQ or rectal ozone.
- Due to small children in Clifford's home, the anti-microbial benefits of Ozone were crucial in this case.



# Clifford's last treatment





Happy Patients = Happy Clients







# ROI

- **5 treatments a day / 5 days / week**
- **Average Charge of \$20.00 = \$2,000.00/mo.**
- **5yr lease of \$354.73/mo.**
- **$\$2,000.00 - \$354.73 = \$1,645.27/\text{mo.}$** 
  - **OR**
- **$\$19,743.24 / \text{yr}$  or  **$\$100,000.00 / 5\text{yr lease}$****

# Doses

- Insufflation: 30% gas, 20cc slow infusion
- mHT: 1-3cc 30% gas with equal amount of blood (Blue Top 3ml Vacutaner)
- Subcutaneous: 5cc / lb
- IV: 3-40cc
- Hot Spot: 30cc over 3min
- Aural Hematoma Lavage: 10-12cc
- Oral Lesions/Dental Rinse: 10-50cc

IV, Lavage, SQ = bubble 70% for 20 min. in 500cc of NaCl  
(lasts for 2-3 hrs)



"Ozone therapy is a great primary treatment as well as an adjunct for both conventional and integrated practices. Wound therapy and gastrointestinal lavage during surgery are two of the most amazing and readily observed manifestations of the healing power of Ozone. Hemotherapy (using Ozonated blood from the patient is then injected IM back into the patient) has proven to be a fantastic therapy and has proven to be efficacious in a number of cases to speed healing and help bring oxygen to the tissues that need it. Overall, we have been incredibly pleased with the results we have seen using Ozone Therapy."

Carissa Harold, DVM, CVA