MedMasters
MASTER THE ART OF HEALING

All Things Ozone

Presented by: MedMasters

Rules of Engagement

- Change your name in Zoom to your clinic name
- Every question posted in Q and A gets you entered into drawing to win oils package OR Champion FS
- Audio disabled
- Lunch is only 15 minutes
- Only one afternoon break

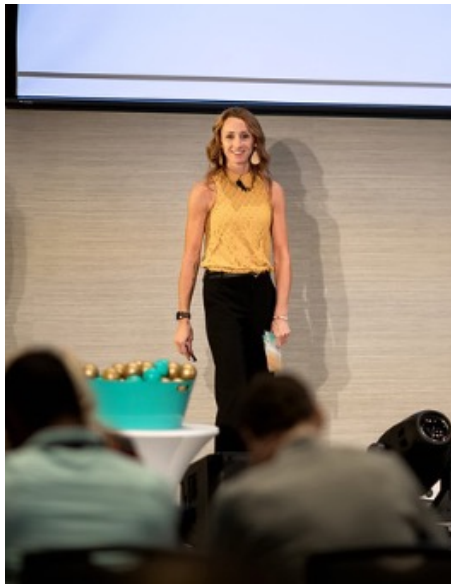
MedMasters

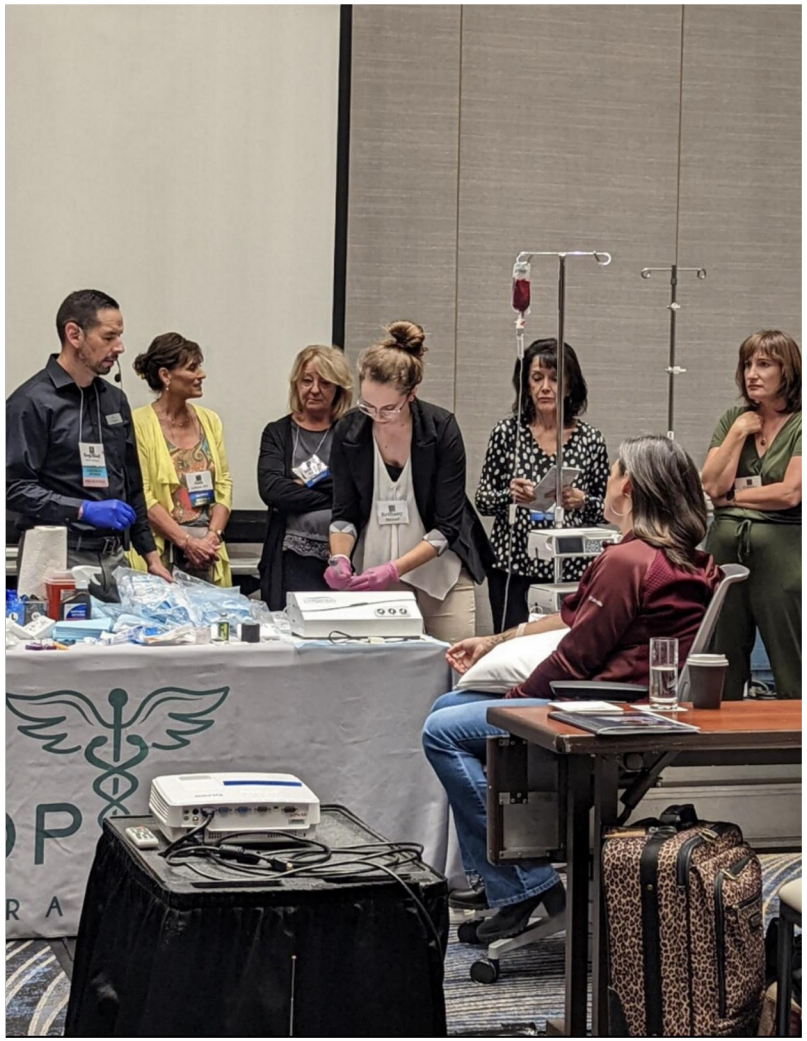
TOTAL

- Started training in 2014
- Trained approx. 3000 practitioners in Ozone and UV
- Trained 820 clinics in Ozone and UV and growing their practices
- 1M therapies administered
- Clinicians in 13 countries

Join our community of practitioners who care deeply for their patients.

About Us





Reasons for Training

- Protect the patient
- Protect the providers
- Protect the medicine

- Physiological understanding of therapies
- Calculating doses
- Accuracy and safety
- Competence and confidence
- Liability
- Malpractice
- Trouble shooting and critical thinking
- A+ Skills

Guaranteed Total Implementation Success

Why Ozone with MedMasters

PROBLEM 1	PROBLEM 2	PROBLEM 3
Patients are not receiving the best outcomes possible.	Clinics are not as profitable as they should be and it's challenging when trying to scale your business.	Staff training, competence and compliance (engagement)

Kim Look

KIM LOOK

- I know what it's like to have lots of knowledge and services but unable to pull them together for best utilization.
- I have grown new and old practices selling millions of dollars in medical services.
- Want to promote safe and effective therapies via great education and practical hands-on learning.

JASON DELEON

Jason has been a part of the Functional Medicine space for 10 years. He has been a patient, marketing representative, assistant, Lab Director and consultant. Despite his broad general understanding of functional medicine modalities his specialty is Ozone. Jason has helped multiples of medical practitioners get started with ozone therapy then guided them to proficiency and profitability.

Jason is super excited to help guide you in your ozone journey whether you are a newbie, need help with Standard Ozone/UBI, Hi-dose ozone therapy, or EBOO Full Spectrum. He is eager to help you reach full confidence with these therapies and ultimately help more patients!

Disclaimer

The training materials provided by MedMasters, LLC (“MedMasters”) to you are for educational purposes only and are not intended and do not provide any advice or services, including medical, psychological, legal, or health advice.

MedMasters provides this training to provide you with information regarding current research. However, you are responsible to investigate any information, research, and treatment to ensure its accuracy and applicability to you, your practice, and your patients.

MedMasters makes no claim regarding:

(1) the medical efficacy of any treatment,

(2) the governmental approval of the training materials and procedures discussed, or

(3) the accuracy or applicability of any research or information.

Treatments and equipment involving ultraviolet blood irradiation and ozone are not approved by the FDA as therapies nor to prevent, cure, or treat any disease or illness. MedMasters and its agents, members, and employees will not be liable for any damages, losses, or causes of action related to or arising from your:

(1) use of the training materials,

(2) use of UBI or ozone therapies, or

(3) provision of services related to the training materials and information provided by MedMasters.

Equipment Disclaimer

Note that the FDA may not recognize or approve any of the equipment or products mentioned in this presentation for a medical purpose and that information is provided at the request of trainee and subject to improve the safety of their chosen use for these devices.

MedMasters is not compensated financially for any device or product mentioned in this presentation, or the sale thereof. MedMasters simply intends to provide support to their clients in terms of where to purchase. It is the responsibility of the provider to research and understand their obligation in using any products or devices mentioned herein.

All equipment needs, questions and concerns need to be directed to the equipment or product company as MedMasters does not provide service for any manufacturers.

Goals

1. Expand your knowledge of ozone therapies
2. Point you in the right direction to learn more
3. Help more patients

It is our mission to help you!

Topics of Discussion

1. Insufflations - ALL OF THEM! – Rectal, Ear, Sinus, Vaginal, Bladder
2. Ozonating water to drink
3. Limb bagging
4. Ozone Cupping
5. Ozonide Inhalation
6. Ozone Oils
7. Ozone in MSK
8. Ozone in Aesthetics
9. Major Autohemotherapy
10. O3UV, High Dose, EBOO Full Spectrum
11. Ozonated Saline IV
12. Direct IV Ozone
13. Minor Autohemotherapy
14. Layering Different Ozone Therapies

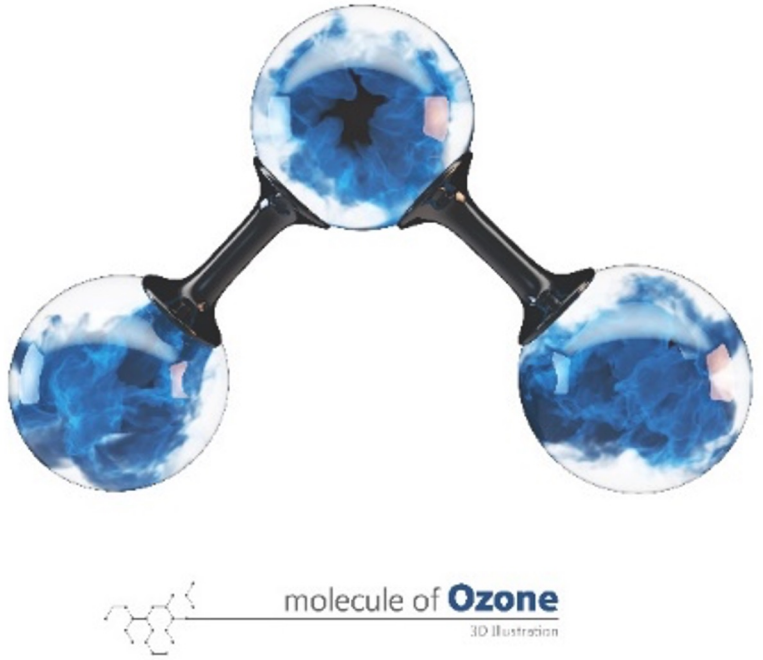
Medical Ozone

Medical Ozone History

- Used medically since the early 1900s
- Used internationally with safety and efficacy
- 1976 to date FDA says, “Ozone is a toxic gas with no known medical use”.
- 10+ major books and over 11,000 papers and studies.
- Well known bio-hacking modality

Benefits of Medical Ozone by Velio Bocci

- An essential tool for 130+ disorders
- It works on chronic and autoimmune disorders
- It’s quick with little to no side effects
- Very inexpensive
- Over 100-year history
- It’s effective when other medicines failed
- Over 40,000 physicians use it



Medical Ozone in the Research by Dr. Velio Bocci

- Instantly reacts with blood products
- Bacterial, fungicidal and virucidal - *indirectly* activates the non-specific defense system
- Analgesic effects by acting on nerve endings in damaged tissue
- Detoxification effects – correction and activation of metabolic processes in the liver and kidney tissues.
- Vasodilator to improve micro and peripheral circulation
- Increases cellular efficiency - Activation of O2 dependent processes – catalyst of aerobic oxidation > mitochondrial activation > cellular respiration > ATP synthesis

Medical Ozone in the Research by Dr. Velio Bocci

- Hemostatic effects (dose dependent) - High concentrations administered for external use cause evident hyper coagulation effect, while parenteral administration of low concentrations is characterized by the decrease in thrombocytic and coagulative levels of hemostasis and increase in fibrinilytic activity.
- Immune-modulating effects
- Optimization of pro- and anti-oxidant systems
- Hormetic effect – stress to body that then creates secondary benefit
  - Optimization of pro- and anti-oxidant systems is regarded as one of the main effects of systemic ozone therapy which is realized through its influence on cellular membranes and bringing to balance the levels of lipid peroxidation products and of antioxidant defense system.

General Aspects of Ozone Therapy

By: Ruhi Cakir

1. Creates Reactive Oxygen Species (ROS) - Early and short acting eliciting a crucial “therapeutic shock”
2. Creates Lipidperoxides (LOPs) – Late and long lasting
3. Creates H202
    - Increases alkoxyl radicals
    - Increase SOD, NO, CO and bilirubin
    - Increases GSH peroxides and reductase
    - Increases catalase
    - Increases heme-oxygenase – most important antioxidant defense & protective enzyme
    - Increases activation of platelets which release growth factors
    - Treats ischemia
    - Induces heat shock proteins
    - Recruits stem cells
    - Converts NADH to NAD – Mitochondrial production

Submitted: November 20th 2013Reviewed: December 2nd 2013Published: May 28th 2014

When To Use Ozone

Main Indications For Ozone

- Autoimmune Diseases
- Viral/Bacterial Infections
- Inflammatory Conditions
- Orthopedics
- GI Disorders
- Circulatory Conditions
- Dermatology
- Respiratory Diseases
- Eye Diseases
- Wound Care

Ozone Treats Over 130 Illnesses

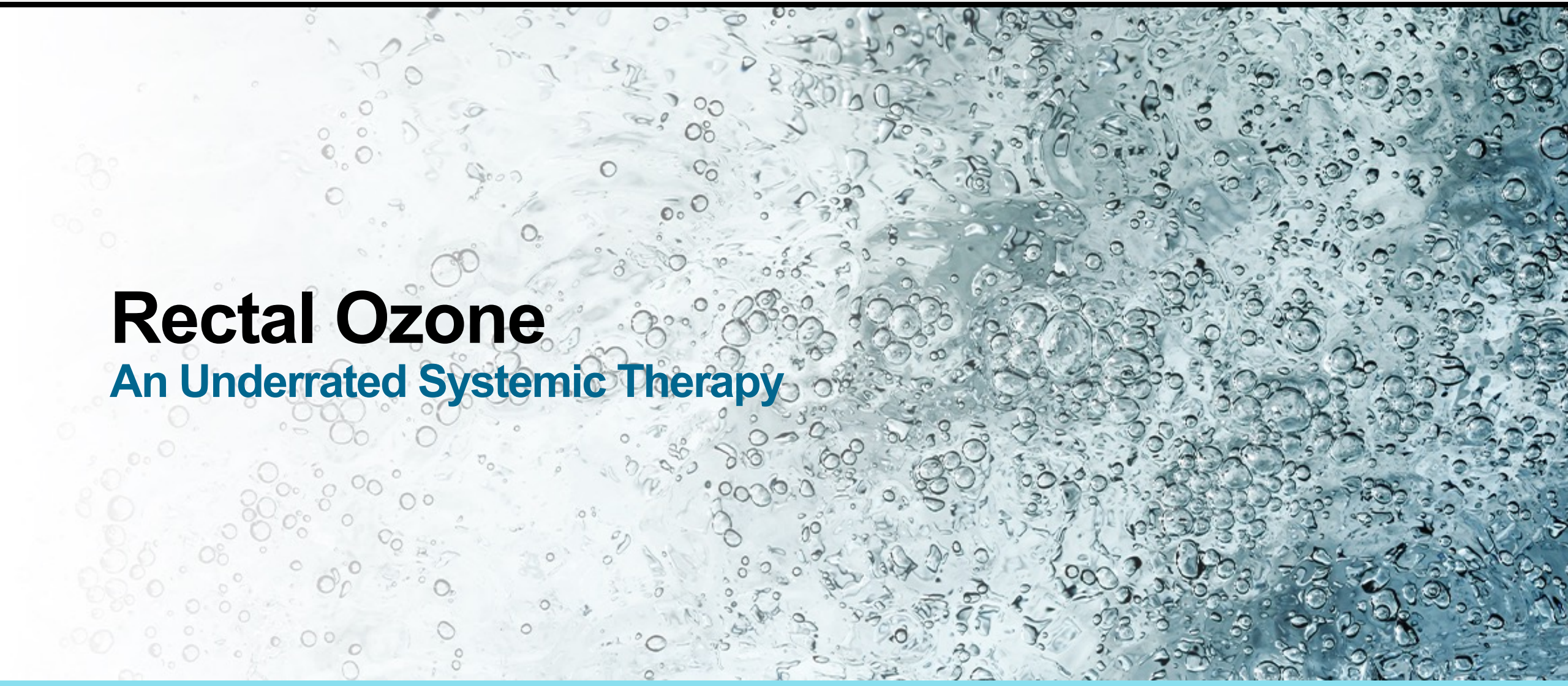
Popular Indications for Ozone

- Anti-aging
- Sports performance
- Sports Recovery
- Aesthetics
- Sexual Performance
- Post-pandemic Treatment
- Prevention
- ”CEO” Performance
- Regenerative Medicine
- Functional Medicine

Contraindications

We advise not to administer ozone if your patient has the following:

1. All cases with Blood Coagulation Failure
2. Bleeding Organs
3. Thrombocytopenia
4. Hemorrhagic or Apoplectic Stroke
5. Recent Myocardial Infarction
6. Alcohol Intoxication
7. Significant G6PD deficiency (favism)/ acute hemolytic anemia
8. Hyperthyroidism if not controlled
9. Leukemia
10. Pregnancy – First trimester only and medical-legal reasons



Rectal Ozone

An Underrated Systemic Therapy

Who can benefit from Rectal Ozone Therapy?

- Patients who have weak veins/hard sticks
- Patients who are receiving multiple IVs already
- Someone who is battling a chronic condition
- Someone who might need a cheaper systemic ozone option
- Anyone that wants to improve their immune response, improve their oxygen uptake, and improve circulation

More Examples

- Any Autoimmune Disorder (Lyme, EBV, RA, etc.)
- Oncology Patients
- Chronic Infections
- Herpes I and II
- Decubitus Ulcers
- Macular Degeneration
- Ulcerative Colitis
- Skin Issues

Bag Method

How to fill an ozone bag: An ozone bag is connected to an ozone generator and filled to the volume desired. Before you disconnect your bag from the generator, you would use the inline clamp to prevent ozone from escaping after you disconnect the bag.

How to administer: Attach a catheter to the bag, then use a lubricant on about 2-3 inches. Insert the catheter into the rectum 2-3 inches, then release the inline clamp to allow ozone to go into the colon. I recommend using a method similar like rolling a tube of toothpaste in order to get all ozone out of the bag.

Bag Method Image

Catheter and bag setup

Syringe Method

How to fill a syringe: A syringe is attached directly to the ozone generator and ozone is pushed into the syringe. Once the syringe is full, then it is unscrewed from the generator and a catheter is connected.

How to administer: Insert the catheter into the rectum and then depress the plunger until empty. Keep in mind that most protocols call for 200 - 400 ml of ozone so you might have to use multiple syringes or one large syringe to accomplish this. You would disconnect the catheter from the syringe and then reattach a full syringe and repeat this process until you inserted the desired volume.

Directly from the Machine

How: You would need a long piece of tubing that would connect to your ozone generator on one end and then connect to a catheter on the other side. Next, you would turn on your ozone generator and and then insert the catheter into the rectum

How to administer: You would run the ozone generator for the duration that would give you the volume you are wanting. Please note - this method is not recommended as it is difficult to measure exact volume and there can be some issues with pressure buildup.

Volume and Concentration Overview

Volume ranges:

- 200 - 400 ml - for adults
- 15 ml - 120 ml - for kids

Concentration Ranges:

- 20 - 40 ug/ml (gamma) - for adults
- 10 - 25 ug/ml - for kids
- 60 - 70 ug/ml - for ulcerative colitis only, with active bleeding

Low and Slow Protocol

- Start off with 200 ml of around 20 gamma for 3 times a week
- Titrate up 10 gamma each week until you reach 40 gamma at 200ml
- After 1 month start this process over, but now with 400ml at 3 times a week
- End goal would be around 40 gamma/400ml This is where you would stay for as long as they need to do rectal ozone
- Add more days as needed or an acute situation arises

Aggressive Approach

- Start with 200ml of around 20 gamma 3-5 times a week
- Week 2 you will move up to around 30 gamma at 200ml 5x a week
- Week 3 you will move up to around 40 gamma at 200ml 5x a week
- Week 4 you will move up to around 40 gamma at 400ml 5x a week
- Continue at 40 gamma and 400ml

Ulcerative Colitis with Active Bleeding

Ozone in high concentrations can have a hyper coagulation effect, which is why you would use the following protocol for a patient with this diagnosis and symptoms. Once the patient is no longer bleeding, they can return to a normal concentration range.

Remember: Too much volume is painful for someone with UC

60 - 70 ug/ml
50 ml - up to 2x per day

Things to Remember

- It is recommended to do rectal ozone after a bowel movement, enema, or colonic
- A catheter should only be inserted about 3 inches or so to allow absorption into the portal vein.
- If you experience any pressure during the administration, then push the catheter in or back out an inch or so
- Ozone absorbs into the mucosal lining of the colon almost instantly, so there is no need to trap our hold the ozone longer than 30 secs
- Be sure to keep positive pressure on the bag to prevent any suction that could draw back fecal matter back into your bag or syringe

Things to Lookout For

- Rectal ozone is a systemic treatment, so you would want your patient to avoid doing both RI and an Ozone IV on the same day
- A herxheimer response is possible from an RI treatment
- Herx symptoms might be lymph drainage, rash, achy joints, and fatigue
- If a herx reaction occurs, then have your patient take a week break or so for their system to reset.
- You would want them to start off on ½ as much concentration and volume that caused the herx
- Mucus in the stool could be an indicator that you are doing too strong or too much volume

Patient Testimonial

- Three-year old female with severe eczema
- She has gone through multiple different topical medications through a traditional Dermatologist
- Originally came in to do IV O3UV, but nurse could not feel a view due to the severe eczema.
- Switched to Rectal Ozone 2-4 times a week

Patient Testimonial – Before Pics

Patient Testimonial – After Pics

Q&A Time for RI

What are some questions you have regarding this therapy?

Ear Insufflation

Who can benefit from Ozone Ear Insufflation?

- Ear Insufflation is considered systemic to the head
- Patients who have the following:
  - Sinus Infections
  - Tinnitus
  - Pre/Post Dental Work
  - Mold Exposure
  - Macular Degeneration
  - Brain Fog
  - Preventative care

How is Ear Insufflation done?

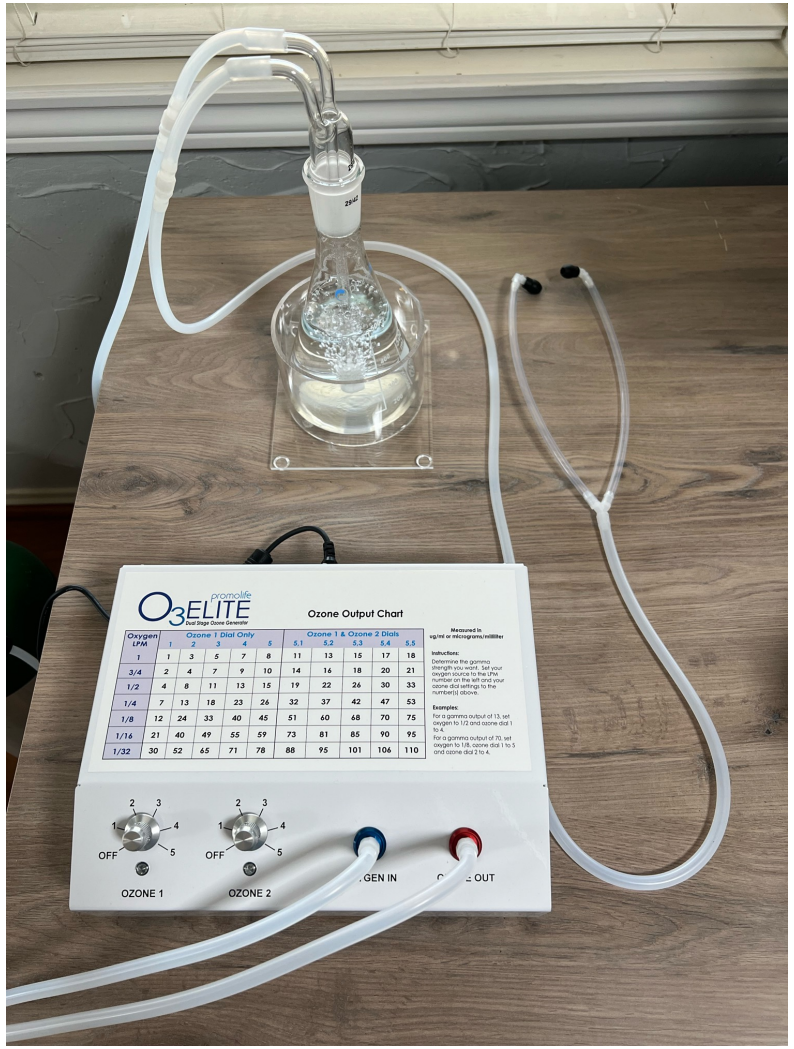
Ozone gas is transferred into either a syringe or through a modified stethoscope and then ran into the ears

Stethoscope w/Water Bubbler Method

How this is done: A modified stethoscope is connected to a water bubbler and then the bubbler is connected to the ozone generator. Ozone gas is run into the ear canal

Why this method is good: Running the ozone through the bubbler first adds humidity into the circuit, which helps the ozone absorb deeper into the tissue. This method can be super quick and effective. In my experience, this would be the best way to do an EI treatment and could be considered systemic to the head.

Why this method is bad: Water bubbler systems can be expensive.



Syringe Method

How this is done: A syringe is connected directly to the ozone generator to fill it and then the ozone is pushed into the ears slowly.

Why this method is good: Super cheap and easy, all you need is an ozone machine, moist cotton ball, and a 60ml syringe.

Why this method is bad: This is often used with kids since you only need a small amount of volume and could lack effectiveness - you can always do more volume

Volume, Duration and Concentration Overview

Stethoscope (with water bubbler) method:

Duration:

2– 6 mins

Concentration:

- 10 - 25 ug/ml - for adults
- Start with a low concentration (10 gamma) and duration (2 mins) then work up.
- Please make sure you have a fan to help dissipate the residual ozone.
- Open window would be best

Volume, Duration and Concentration Overview - cont

Syringe

Volume:

10 – 60 mL per ear

Concentration:

- 10 - 25 ug/ml - for adults
- Use moist cotton ball in ear to push ozone through
- Start with a low concentration (10 gamma) and work up
- Please make sure you have a fan to help dissipate the residual ozone

Low and Slow Protocol (stethoscope and bubbler method)

- Flow rate of oxygen should be below 1/4 lpm and will vary depending on your machine
- First treatment is 2 minutes at around 10 gamma and 3 times per week.
- Titrate up 30 seconds up every session to the final time of 6 mins per session
- After 1 month start this process over, but now at 20-25 gamma at 3 times a week and work up the final time of 6 mins a treatment
- Add additional days of therapy depending on patient tolerance

Aggressive Protocol

- Start patient off for 4 minutes at 20-25 gamma at 5 times a week
- Titrate up 30 seconds each treatment until patient reaches 6 mins a treatment
- Practitioner can decide to go up to 7 days a week at the 6 mins/20-25 gamma

Low and Slow Protocol - Syringe Method

- First week - 15 ml of 10 gamma in each ear for 2 - 3 times per week
- Second week - 15 ml of 15 gamma in each ear for 2-3 times per week
- Third week would be 15 ml of 25 gamma in each ear for 2-3 times per week
- Fourth week - Start this process over, but now at 30 ml of 20-25 gamma at 3 times a week
- Practitioner may add additional days of therapy depending on patient tolerance

Aggressive Protocol – Syringe Method

- Start patient off on 30 ml of 15 gamma per ear 3 times per week
- Second week - 60 ml of 25 gamma per ear 3 times per week
- Third week - 60 ml of 25 gamma per ear 3 times per week where they will stay
- You can add additional days to the protocol as the patient tolerates

Protocol Summary

- Most chronic conditions require between 5-7 days a week for a couple weeks
- Most acute conditions require 3-5 days for a couple weeks and then back down into a maintenance frequency
- Maintenance is 2-3 times a week
- Volume for syringe method 10 - 60 ml per ear
- Concentration ranges are between 10 - 25 gamma
- Start everyone off at the lowest concentration first for EI

Things to Remember

- Start everyone off at the lowest concentration and duration first on EI
- You do not want to press the stethoscope into the ears, as the pressure build up could cause damage to the eardrum
- This treatment can emit a lot of ozone into your room, so a floor fan would be ideal to help prevent coughing or watery eyes.

Things to Lookout For

- Ear insufflation can cause a herx reaction that can cause a rash or some lymph drainage
- Doing too long or strong of a session can cause the ear canal to become weepy or dry the canal out.
- Some patients can experience a headaches from this type of therapy.
- If your patient has an adverse reaction, then you would want them to take a 3- 5 day break and then start back on ½ as much concentration and volume that caused the herx

Q&A Time for Ear Insufflation

What are some questions you have regarding this therapy?

Sinus Insufflation

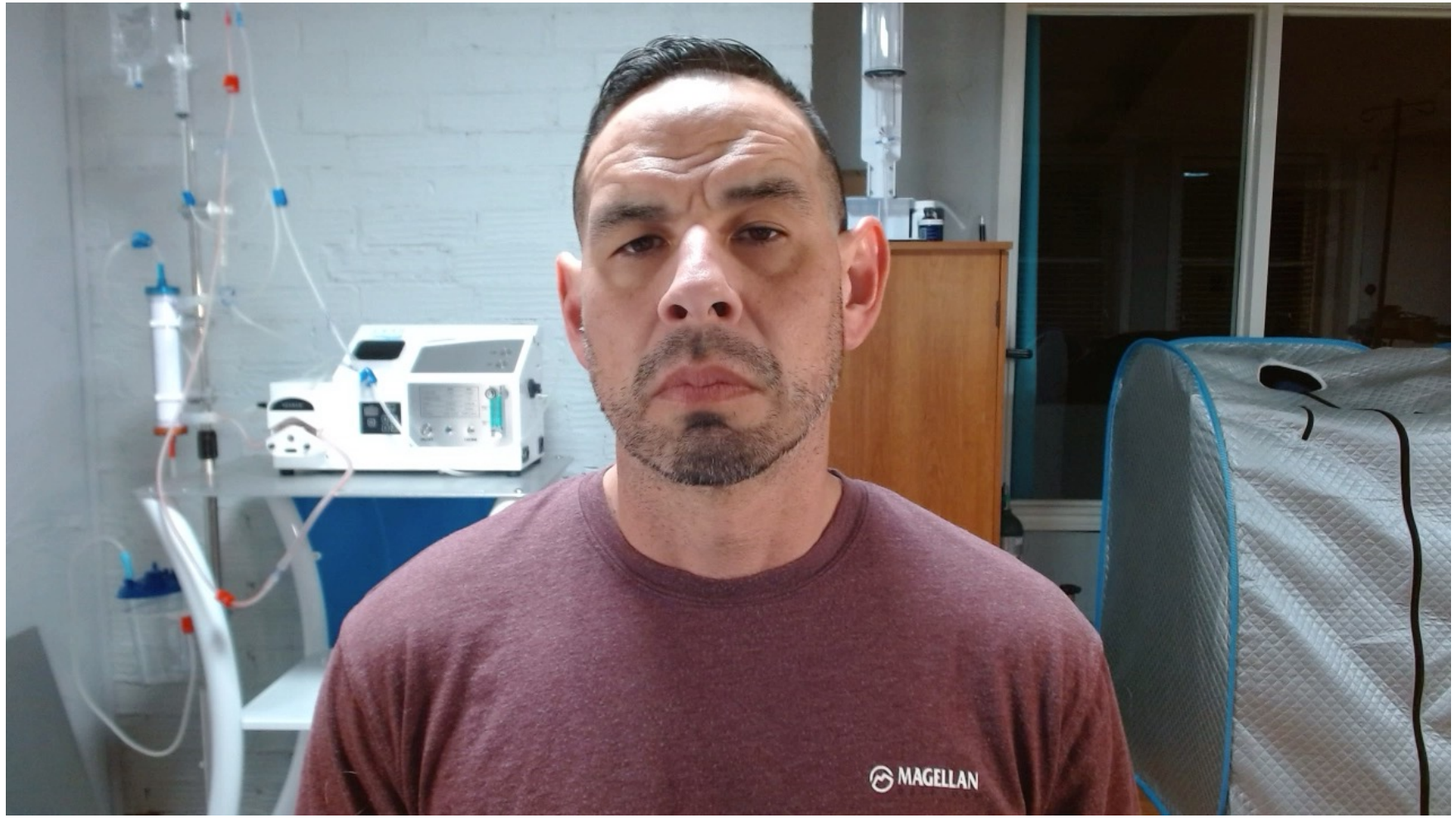
Who can benefit from Sinus Insufflation?

- Chronic/acute sinusitis
- Mold exposure
- Recent dental procedure
- Long Hauler Pts
- Use EI to help achieve greater outcomes
- Allergy
- Preventative care

How is Sinus Insufflation done?

You take a syringe (typically 60 mL) and fill it with ozone. The patient then will inhale and hold their breath. The practitioner will then push in 30 mL of ozone into one nostril and have the patient hold that nostril. The practitioner will then push the remaining 30 mL into the other nostril and your patient will then pinch both nostrils shut. The patient will hold their breath for as long as they can and then exhale out of their nose.

How is Sinus Insufflation done?



Concentration and Volume Overview

Concentration Ranges:
10 - 30 ug/ml (gamma)

Volume ranges:
10 – 30 mL per nostril

Frequency:
Can be done daily if needed

Low and Slow Protocol

- 10 gamma and 10 mL per nostril for 2-3 times per week
- 20 gamma and 20 mL per nostril
- 30 gamma and 30 mL per nostril in week 3
- Can be done daily if tolerated

Aggressive Protocol

- 10 gamma and 30 mL per nostril for 1st treatment
- 20 gamma and 30 mL per nostril for 2nd treatment
- 30 gamma and 30 mL per nostril for 3rd treatment
- Can be done daily if tolerated

Things to Remember

- Please make sure that as you instruct the patient, they repeat the instructions back to you
- You can not breathe in ozone as it will irritate the lungs. Your patient will cough excessively, and their eyes will water.
- You might experience a mild burning sensation if you do have a sinus infection.
- If you get a headache, then you most likely did too much concentration or volume. Do half as much of both on your next treatment

Things to Remember/Knowledge Transfer

- Having your patient sit next to a fan as they blow the trapped ozone out of their nose could help them keep from breathing the excess ozone back in
- I would avoid doing this therapy on kids and use BOO instead.
- Not everyone likes the smell of ozone and if they are sensitive to it, they most likely will not like this therapy as you will smell ozone for about the next 15 mins or so
- The time will vary but this therapy will create a lot of drainage so keep the Kleenex close!

Q&A Break to discuss multiple types of BI

What are some questions you have regarding this therapy?

Vaginal Insufflation

Who can benefit from Vaginal Insufflation?

Patients who have the following:

- Infections
- Re-occurring yeast infections
- STDs such as HPV
- Chronic conditions
- All things female
- Preventative care

How Vaginal Insufflation done?

- Ozone gas is transferred into either bag/syringe then attached to a catheter where the ozone is moved into the vaginal canal.
- Tubing going from the ozone generator to a silicone insert that is used to ozone into the vaginal canal

The Equipment and Accessories Needed

Volume, Duration and Concentration Overview

Bag and Catheter Method:

Volume:

100-750 mL

Concentration:

- 15 - 30 ug/mL - for adults
- Start with a low concentration (10 gamma) and 200 mL then work up
- Please make sure you have a fan to help dissipate the residual ozone
- Open window would be best

Volume, Duration and Concentration Overview - cont

Vaginal Insert:

Duration:

5 – 20 mins

Concentration:

- 10 - 30 ug/ml
- Start with a low concentration (10 gamma) for 5 mins.
- Please make sure you have a fan to help dissipate the residual ozone
- Open window would be best

Low and Slow Protocol (Bag and Catheter Method)

- Start with a concentration of 10 gamma and 200 mL
- 2-3 times a week
- Move up 5 gamma each week until you reach 30 gamma
- After your first month, move to 400 mL each treatment @ 30 gamma
- After second month, move to 750 mL each treatment @ 30 gamma
- Move up to 5 days a week

Aggressive Protocol – Bag and Catheter Method

- Treatment 1 – 10 gamma and 400 mL
- Treatment 2 – 20 gamma 750 mL
- Treatment 3 – 30 gamma 750 mL
- 3-5 days a week
- Up to daily treatments if tolerated

Low and Slow Protocol w/Vaginal insert

- 10 gamma at 5 mins and 2-3 times per week
- Titrate up 5 mins each treatment at 10 gamma
- Once you get to 20 min sessions, start titrating up 5 gamma each therapy
- Final goal should be 20 mins at 30 gamma per treatment
- Add additional days of therapy depending on tolerance

Aggressive Protocol

- Start with 5 mins at 10 gamma for your first treatment
- 15 mins at 15 gamma
- 20 mins at 20 gamma
- 20 mins at 30 gamma
- Move to 5 times a week on week 2
- Daily Treatments

Bladder Insufflation

Who Can Benefit From Bladder Insufflations?

- Chronic UTIs
- Interstitial cystitis
- Patients who have a cancer diagnosis
- Bladder Pain Syndrome

How is Bladder Insufflation done?

A disposable urinary catheter is inserted into the urethra to gain access into the bladder. Often-times, ozone water, NS, or isotonic water is then pushed into the bladder, then ozone gas is pushed in via syringe

Volume, Duration and Concentration Overview

Volume of Ozone:

50 – 100 mL

Concentration:

- 10 - 25 ug/mL
- Start with a low concentration 10 gamma and work up progressively each treatment by 5 gamma.

How is Bladder Insufflation done?

- Gas administration was performed by an aseptic technique and with a disposable urinary catheter (no. 10; 3.3 mm diameter) until contact with the trigone of the urinary bladder. This urinary catheter was also connected to a silicon-treated polypropylene syringe (ozone-resistant) which received 60 mL of ozone at the ozone reactor outlet. Our pilot study previously determined this standardized volume (bladder capacity) following ozone therapy guidelines [24] and intravesical ozone protocols (50–100 mL) [13].
- In each ozone therapy session, bladder lavage was performed, without hydrodistention, with 0.9% saline solution (500 mL, NaCl). After the lavage, bladder emptying was performed via a urinary catheter, followed by administration of a predetermined intravesical ozone gas (ozone mass of 2.5 mg) volume (60 mL) through a syringe connected to the urinary catheter. This volume was previously determined by uroflowmetry analysis (unpublished data) and data from other ozone guidelines [13, 24]. This application represents a potentially immunomodulatory and antioxidant stimulus effect [24] and a physiologically adequate level for systemic ozone administration, according to Viebahn-Hänsler and colleagues [25].
- The patients, in standing position, were instructed to avoid the spontaneous liberation of the intravesical gas for 15 min. This time was mainly determined by the life of the ozone molecule (temperature dependency) [13]. The ozone applications were performed twice a week, with a total of six sessions (3 weeks total), also based on similar protocols [13, 24] and in an animal model study [17].

*Effectiveness of intravesical ozone in interstitial cystitis by the O'Leary–Sant symptom index

Q&A Break Time

What are some questions you have regarding this therapy?

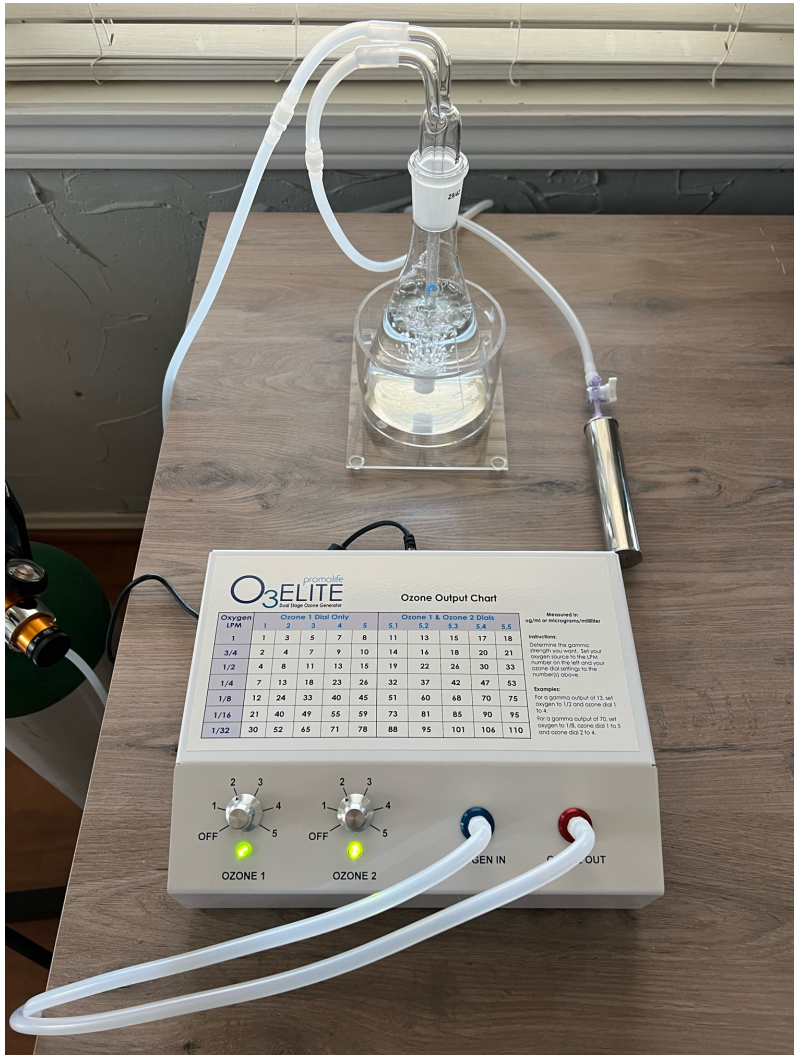
Ozone Water

Who can benefit from Ozone Water?

- Patients who have ulcers in their mouth (swishing after dental procedures), esophagus, or stomach
- Patients who have a wound that would need to be lavaged
- The above two scenarios are the only 2 things ozone water is indicated for, however here are a few situations where ozone water has shown some promising anecdotal returns
- Leaky gut issues, migraines, and acid reflux
- You can also use ozone water as a disinfectant for counters, furniture, etc…

How do you make Ozone Water?

Ozone gas is run through tubing that has a diffusion stone on the end of it (looks similar to what you would see in an aquarium) into a flask or container. Once this ozone has been circulated over a certain amount of time the water would be considered fully saturated



Concentration and Volume Overview

Concentration Ranges:

20 - 80+ ug/ml (gamma)

Volume ranges:

16 oz - ?

Ozone Water – Flask Method

- **How to make ozone water in a flask:** A flask purchased from an ozone company is going to have tubing that will connect one end to an ozone generator, and the other end to a destruct. Fill up your flask with water, distilled is preferred, but you can use drinking water as well. Next you will connect our ozone generator to the flask and the other tubing to the destruct. Once you turn your oxygen and ozone generator on, you will be running ozone into your water.
- **How to administer:** Once you have fully saturated your water, then you would pour that water into a glass, ceramic or stainless steel cup. Ozone can react negatively to some materials so those types of cups are important. Next, drink up!!

Ozone Water – Diffusion Stone Method

- **How to use a diffusion stone:** A diffusion stone will have tubing that you will be able to connect to your ozone generator. You place the stone into the jar, or container or your choice and turn on your oxygen/ozone generator. You are now ozonating water.
- **How to administer:** Once your have fully saturated your water, remove your stone and then you can use your ozone water. I would recommend pouring the water into a glass, ceramic, or stainless steel cup if you want to drink it.

Pros and Cons

Flask:

Pros - Ease of use and ability to use a destruct

Cons - You are limited on volume, can be expensive

Diffusion Stone:

Pros - You can ozonate water in anything almost and inexpensive

Cons - You will smell a lot of ozone

Low and Slow Protocol

- Start off with 16 ounces of water at around 20 gamma or roughly 1⁄4 LPM (Liter per min) 2-3 times a week
- After 1 week, patient can move up to 32 ounces at or around 20 gamma for 2-3 times a week
- Patient can then titrate up to as high of a level of gamma as desired

Aggressive Protocol

- Start off with 16 ounces of water at around 20 gamma 2x per day, 5 days a week
- After the 1st week, work up in strength/gamma by 10 every every 2-3 days on the same regimen of 16 ounces 2x per day
- You can then titrate up to as high of a level of gamma as desired

Things to Remember

- Ozone water has a short shelf life and should be used within 30 mins or so before it dissipates
- Remember that ozone can react negatively to certain materials, so use glass, ceramic or stainless steel when making or storing ozone water
- If you are using a diffusion stone, then I would recommend a fan to help diffuse the smell of ozone being emitted
- Colder water absorbs ozone better than any other temp, but I would not add ice to the water as you make it.

Things to Lookout for

- Ozone water has a couple of mild negative reactions in the body when you either drink too much ozone water or make it too strong
- If you get an instantaneous scratchy throat, or a headache similar to a brain freeze, then you are probably drinking too strong or too much ozone water

Protocol Summary

- Most chronic conditions require between 5-7 days a week for several months
- Most acute conditions require 5-7 days for a couple weeks and then back down into a maintenance frequency
- Maintenance is 2-3 times a week
- Volume - depends on patient
- Concentration ranges are between 20 - 80+ gamma

Q&A Break

What are some questions you have regarding this therapy?

Dr. Sara Alfarro

Joint Injection Discussion

Toby Segal, PurO3

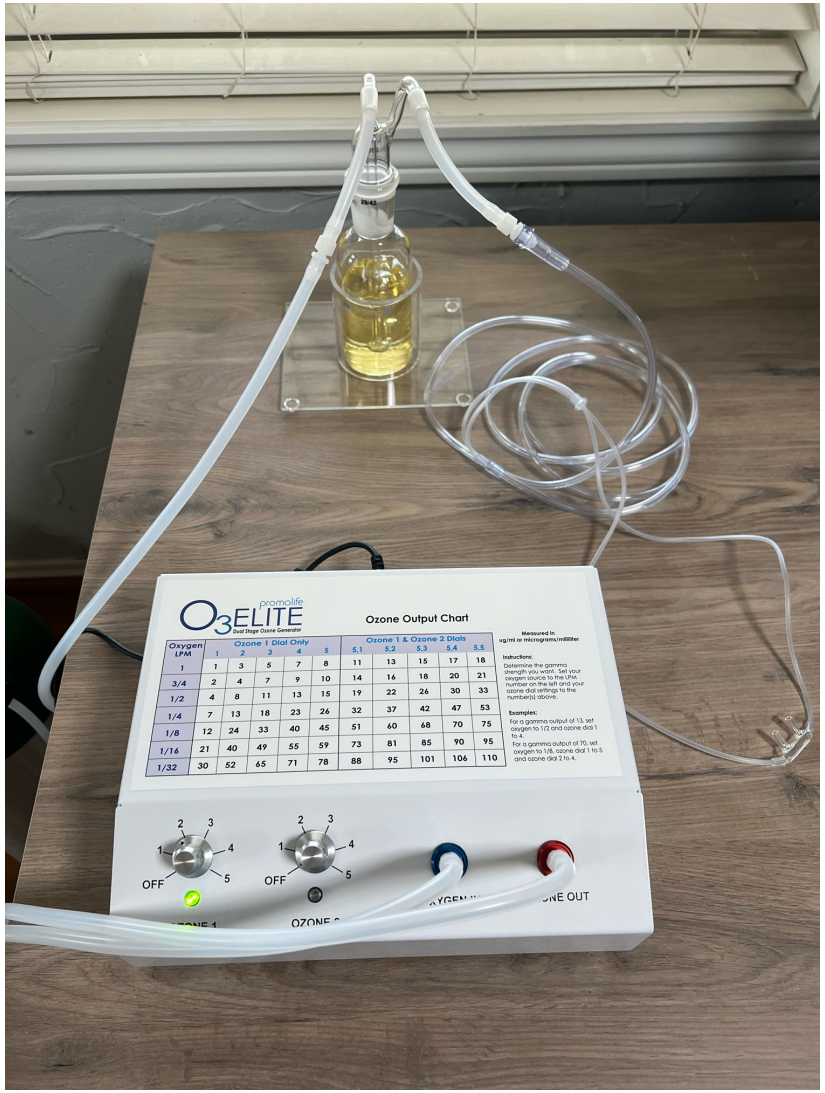
Ozone Oil Discussion

Inhaling Ozonides

How is BOO Done?

You would need to purchase an ozone oil bubbler which has two sets of tubing connections. Fill the oil bubbler with oil (typically olive oil), then connect one end of the tubing to the ozone generator which passes ozone through the oil. Next, you will connect the second set of tubing to a modified nasal cannula going into your nose

How is Inhaling Ozonides Done? – Pic for example



Who can benefit from Inhaling Ozonides ?

Patients who have the following:

- Sinus Infections
- Long Haulers
- Asthma
- Mold Exposure
- COPD
- Brain Fog
- Patients who are sensitive to the smell of ozone
- Fungal Infections

You can breathe Ozone??

- Ozone ran through oil actually converts O3 into an ozonide which is safe to breathe.
- Ozonides are created when ozone binds to the polyunsaturated fat in the oil
- Ozonides are stable ozone essentially
- O3 has a shelf life in a syringe of about 30 mins
- O3 in oil can last anywhere from about 2-5 years

Inhaling Ozonides FAQs

How much oil do you use? Typically only about 10-12 ounces or so

What kind of oil? – Olive oil is most commonly used

Do I need to replace the oil each treatment? Nope!

How long do you reuse the oil? Your oil will turn clear as it becomes fully ozonated, then you can repurpose it as ozone oil. This will vary from months to days depending on how heavy you use this treatment

Oxygen and Oil are a fire hazard correct? Yes, they are. Please do not do this treatment next to a campfire.

Volume, Duration and Concentration Overview

Duration:

2 – 45 mins

Flowrate:

¼ lpm is ideal

Concentration:

- Only therapy where flowrate is more important that concentration
- Start with a short session of about 2-5 mins then work up until 45 mins or as much as tolerated

Low and Slow Protocol

- Flow rate of oxygen should be at 1/4 lpm
- First treatment is 2 minutes
- Titrate up 1 minute every session to the final time of 15 mins per session, 2-3 times per week
- After 1 month or 15 sessions, start this process over, but now titrate up 5 mins ever session until you reach 30 mins a session – 2-3 times per week
- Add additional days of therapy depending on patient tolerance

Aggressive Protocol

- Start patient off at 5 mins first treatment
- Titrate up 5 mins each treatment until patient reaches 45 mins a treatment
- Daily Treatments

Protocol Summary

- Most chronic conditions require between 5-7 days a week for a couple weeks
- Most acute conditions require 3-5 days for a couple weeks and then back down into a maintenance frequency
- Maintenance is 1-2 times a week

Things to Remember

- Some patients can experience headaches after an inhaling ozonides treatment, so you might want to decrease the time or even the gamma (concentration of ozone) by half if this happens to help offset these symptoms
- This is the ONLY safe way for your patient to breath in ozone

Things to Lookout For

- Nasal Cannulas can be reused, just wipe with alcohol when done
- Flow of ozone into the oil is more important that concentration
- I keep my bubbler sitting in oil when not in use
- DO NOT leave your oil bubbler connected to your ozone generator when done

Q&A Break

What are some questions you have regarding this therapy?

Limb Bagging

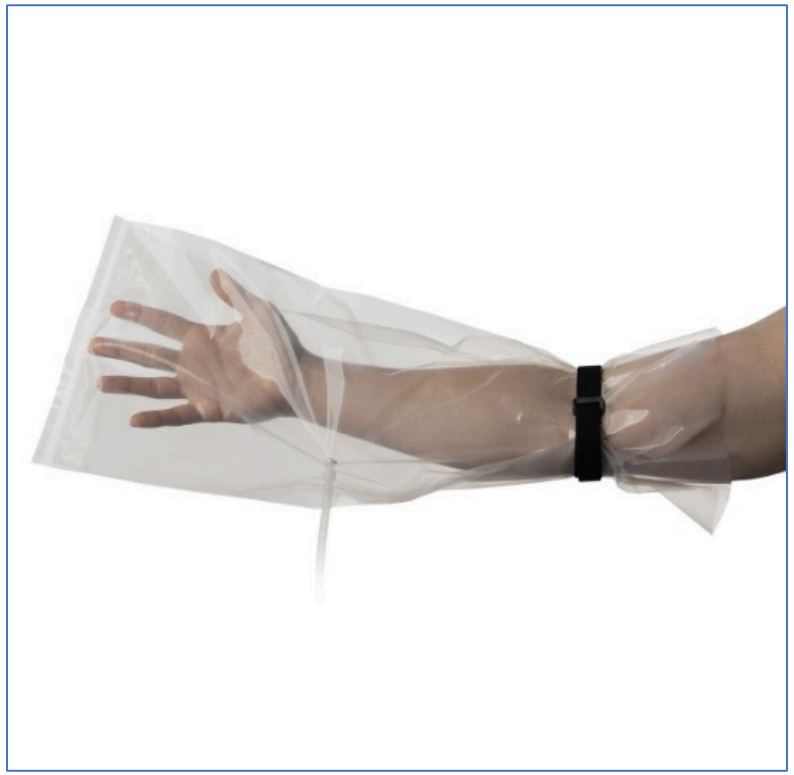
Who can benefit from Limb Bagging?

- Patients who have ulcers, open wounds, bug bites or punctures
- Patients who have a severe rash or skin infection
- Someone who has a fungal infection
- MRSA patients

How is Limb Bagging done?

- **How to use ozone limb bag:** An ozone bag is connected to an ozone generator via silicone tubing and placed over a patient's arm or leg. You would next turn your ozone generator on, circulating ozone over a site. If you have a way to connect an ozone destruct to the bag then this would be ideal.
- **How to administer:** You turn your ozone generator on, circulating ozone over a site. If you have a way to connect an ozone destruct to the bag then this would be ideal. Next you would set a timer for 30 mins, and once that is done you can push all the ozone trapped in the bag into the destruct, then remove the bag. I would recommend taking the bag off outside if possible to avoid having a large amount of ozone emitted into your room.

What does a Limb Bag look like?



Limb Bagging Protocol

- This is a 1-month protocol
- Start off with 60 gamma for 30 mins, 3-5x a week
- Titrate down 10 gamma each week until you reach 30 gamma
- If you have a severe wound that is weepy, then you can start at 80 gamma, then titrate back down each week by 10 gamma

Protocol Summary

- Start off at 60 gamma (80 gamma if severe) and decrease by 10 gamma each week
- Frequency would be 3 - 5 times per week
- This is a 1-month protocol

Things to Remember

- Ozone does not penetrate the skin very well so Limb bagging will work best if there is a break in the skin.
- The bag will not inflate like a balloon
- It would be best for a limb bag to be used on one patient instead of sharing.
- If you are trying to treat a site like a rash, then moisten the skin first to help the ozone absorb deeper into the tissue

Things to Lookout For

You will release a lot of ozone into your room when you take your limb bag off, so I would recommend taking the bag off your patient outside if possible. If this is not possible, then use an ozone destruct and turn a fan on to help dissipate the ozone out of your room.

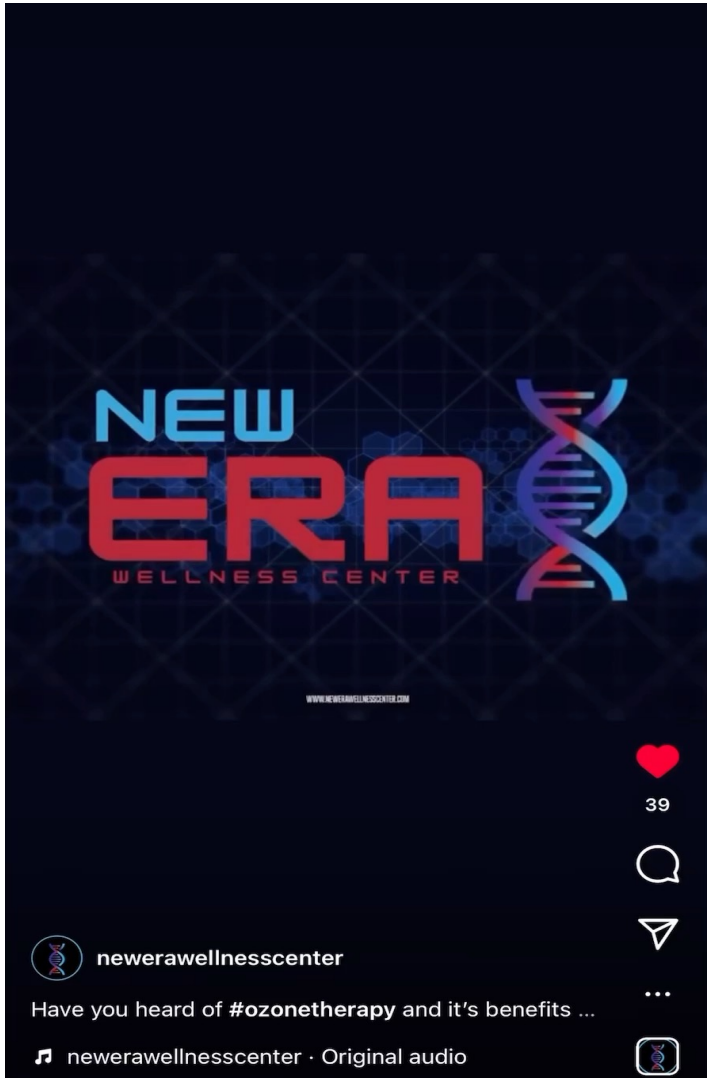
Patient Testimonial – Before & After Pics

Patient Testimonial – Before & After Pics

DAY 1	DAY 2	DAY 5	DAY 8	DAY 13
				

Patient also did an EBOO treatment on Day 1

Patient Testimonial – Before Pics



Q&A Break

What are some questions you have regarding this therapy?

Ozone Cupping

Who can benefit from Cupping?

- Smaller areas that you cannot place or seal a bag on easily eg: face, scalp, area above the knee or trunk
- Patients who have ulcers, open wounds, bug bites or punctures
- Patients who have a severe rash or skin infection
- Someone who has a fungal infection
- MRSA patients

What equipment is needed?

These cups are purchased from ozone generator companies and are more from either silicone or glass. They will have a built-in ozone destruct that is attached to the stem, so you limit the amount of ozone going into the room. You also order these in different circumferences.

How is Ozone Cupping done?

How to use ozone cup: An ozone cup is connected to an ozone generator via silicone tubing and placed over the site you want. You would next turn your ozone generator on, circulating ozone over a site.

Low and Slow Cupping Protocol

- This is a 1-month protocol
- Start off with 40 gamma for 5 mins, 2-3x a week
- Titrate down 10 gamma each week until you reach 10 gamma
- Stay at 5 mins for the entire process

Aggressive Cupping Protocol

- This is a 1-month protocol
- Start off with 40 gamma for 10 mins, 3-5x a week
- Titrate down 10 gamma each week until you reach 10 gamma
- Stay at 10 mins for the entire process

Things to Remember

- Ozone does not penetrate the skin very well so cupping will work best if there is a break in the skin.
- The cup does not attach to the skin like a suction cup
- You can clean the inside of the cup with alcohol
- If you are trying to treat a site like a rash, then moisten the skin first to help the ozone absorb deeper into the tissue

Things to Lookout For

You can irritate the skin by doing too long or using too strong of a concentration. If this happens, then I would recommend a 2 or 3 day, break then resume at half of the concentration/duration that caused the irritation.

Q&A Break

What are some questions you have regarding this therapy?

Lunch Time

Minor Autohemotherapy

Minor Autohemotherapy

- Use a 20 mL syringe to draw 10 mL of blood
- Draw 10 ml of ozone (40-70 gamma) into the syringe
- Use an 18-25 gauge needle to push ozone into the blood causing it to bubble
- Gently shake for 1-3 mins
- Take air and bubbles out of the syringe
- Reinject into the muscle

*Small amount of air is insignificant as it is an IM injection

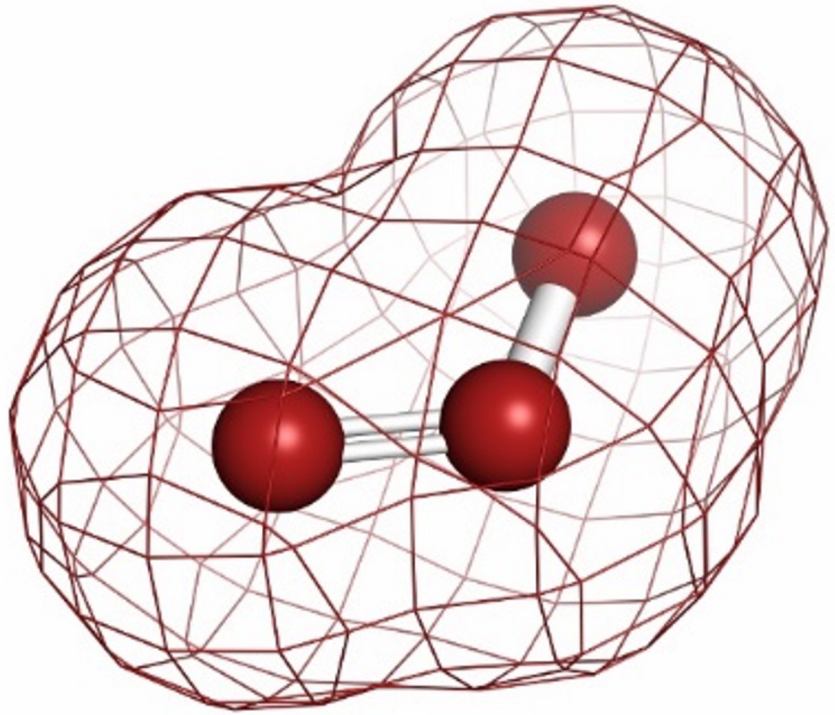
Ozone Push

- 30 mL of Blood and 30 mL

Methods of IV Application

Ways To Administer IV Ozone

1. DIV
2. Saline IV
3. Major Autohemotherapy
4. O3UV – Ultraviolet light with O3
5. Hi-Dose O3UV
6. Ten-Pass
7. EBOO and EBO2



Direct Inter-Venous Ozone (DIV)

Direct Inter-Venous Ozone (DIV)

10 to 30 cc's of ozone gas is injected slowly in the vein

Not recommended by AAOT nor Madrid Declaration

Pros and Cons

Pro

- Inexpensive
- Very effective
- Dr. Robbins has done thousands
- Small gauge butterfly used
- No blood draw necessary

Cons

- More perceived risk
- Perception of safety
- Every patient responds differently
- Small gauge butterfly used
- You must be trained to know what to watch out for

Equipment Needed

- Ozone generator

Ozonated Saline IV

Two World Experts on Ozone and Saline

Professor Eugeny Nazarov – Dr. of Science

President of the Ukrainian Association of ozone therapists

Dr Adriana Schwartz MD

President, AEPROMO (Spanish Assn of Medical Professionals in Ozone Therapy)

President, IMEOF. (International Medical Ozone Federation).

Secretary, ISCO3 (International Scientific Committee of ozone therapy)

***Most popular in Europe and Russia**

Overview

- 300-6000 mcg of ozone
- 500mL-1000mL saline
- Low –dose, slow drip of ozone

On Stand

Wall Mounted

On Pole

Procedure

- Set up equipment – attach ozone tubing to flask
- Add saline to flask
- Ozonate to desired concentration
- Attach IV admin set
- Start patient

Why Ozone Saline IV?

Pros

- Equipment is affordable w/great training support.
- No blood draw
- No anticoagulant required
- Adds ozone over time
- Inexpensive
- Lots of research and studies

Cons

- Ozone does not easily infuse into water/saline
- Low dose
- Ozone half-life is short
- Continual ozonation
- Need an ozone machine available for each procedure.

Equipment Needed

- Ozone generator
- Saline Flask/Bubbler Unit

Major Autohemotherapy

Major Autohemotherapy

- Remove 50 – 300mL of blood
- 500 – 3000 units of heparin
- Ozone is added (40-70 gamma)
  *Historically 1:1 Ratio Blood:Ozone
- Reinfuse

Why MAH?

Pros

- Minimal equipment w/great training support.
- Basic and well known
- Inexpensive
- Lots of research and studies

Cons

- No UBI
- Basic

Equipment Needed

- Ozone generator <40-70 gamma

Lexi Yoo, NP

Aesthetics and Ozone

10 Minute Break

Ozone + UBI

Synergistic Therapies In Ozone UV IV

What does Ultraviolet Blood Irradiation do?

- Germicidal
- Increase IgM activation by 2-16x and IgG by 2-4x
- Rheological (flow properties of blood) effects
- Cardiovascular improvement
- Reduce free radical damage and increase antioxidant enzymes
- Oxygenation effects
- Inflammation reduction
- Immune modulating effects
- Autoimmune issues were drastically reduced
- Decrease in pain
- Regulating the autonomic nervous system

What does Ozone do?

- Bacterial, fungicidal and virucidal – *indirectly* activates the non-specific defense system
- Vasodilator to improve micro and peripheral circulation
- Optimization of pro- and anti-oxidant systems
- Increases cellular efficiency - Activation of O2 dependent processes – catalyst of aerobic oxidation > mitochondrial activation >cellular respiration > ATP synthesis
- Reduces Systemic Inflammation
- Immune modulating effects
- Analgesic effects by acting on nerve endings in damaged tissue
- Detoxification effects – correction and activation of metabolic processes in the liver and kidney tissues.
- Redox balance

How Energy Interacts

- **Ozone –** Instantly reacts with blood products (albumin/lipids)
- **UBI –** Biophotonic energy is absorbed by the hemoglobin

Modern Study On Ozone and UBI

Vasogen gave us a wealth of data with their FDA trials and process patents.

- Chronic Heart Failure
- Peripheral Arterial Disease
- 7 countries
- 2,414 patients
- Class II to IV heart failure
- Double blind
- Ozone and UBI each outperformed placebo
- Combo increased effectiveness by 30%

Vasogen Patents

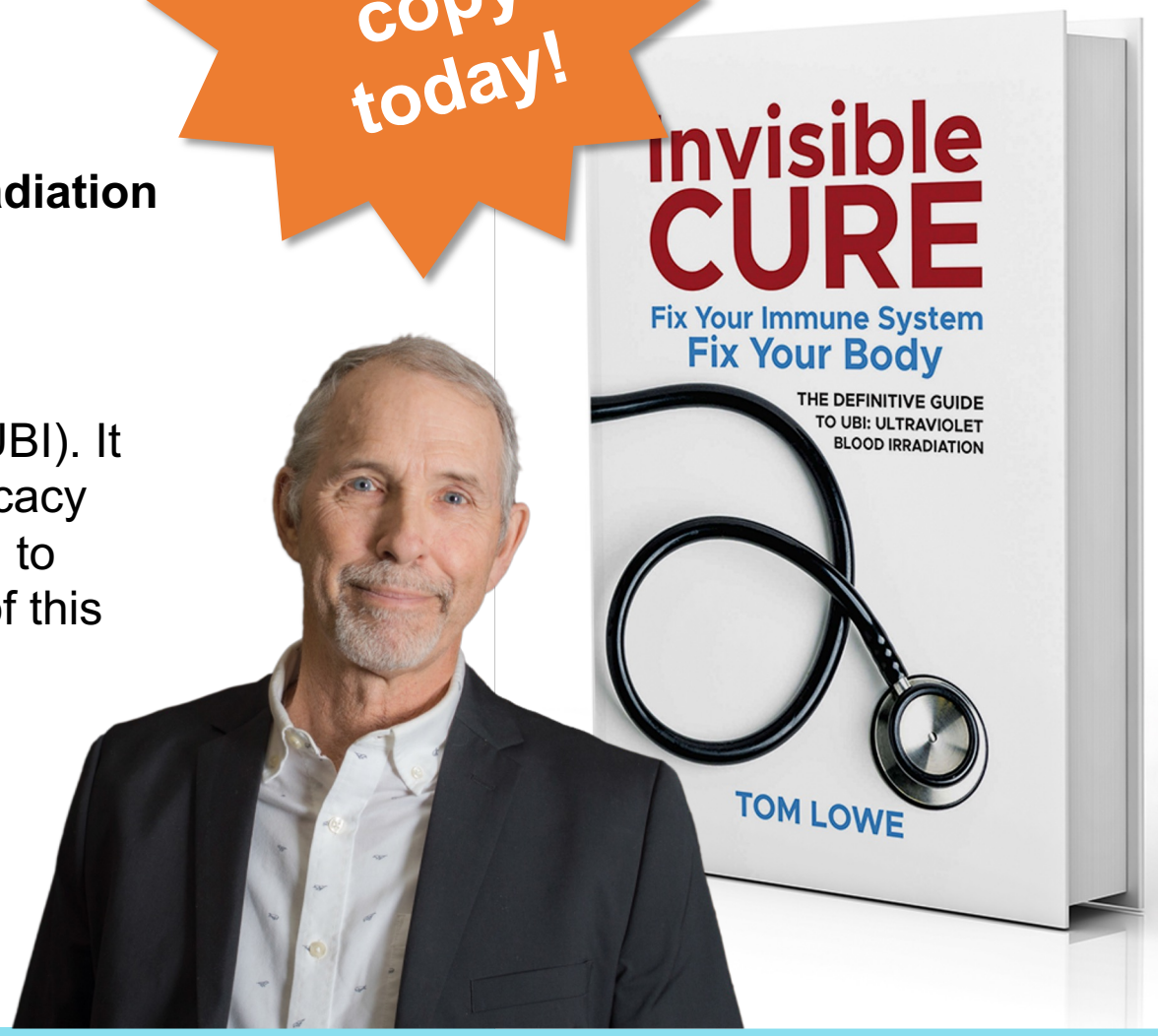
There are a total of 24 patents that apply to Vasogen and the process of treating a myriad of disorders. The first 2 patents listed are of machines, the rest are on the following categories:

- Blood platelets - #3
  Auto Immune disorders #4
  Nitric Oxide (vasodilation) #5
- Traumatic Pain Disorder (RSD) #6
- Preconditioning stress # 7
- Artherosclerosis and CHF # 8,13
- Graft vs Host # 9
  Inflammation # 10,11,12, 19
- Growth Factor # 14
  Vasospastic disorders # 15
- Endothelin related disorders # 16
- Blood Brain Barrier modulation # 17
- CLL # 18

INVISIBLE CURE

The Definitive Guide to UBI: Ultraviolet Blood Irradiation

Get your copy today!

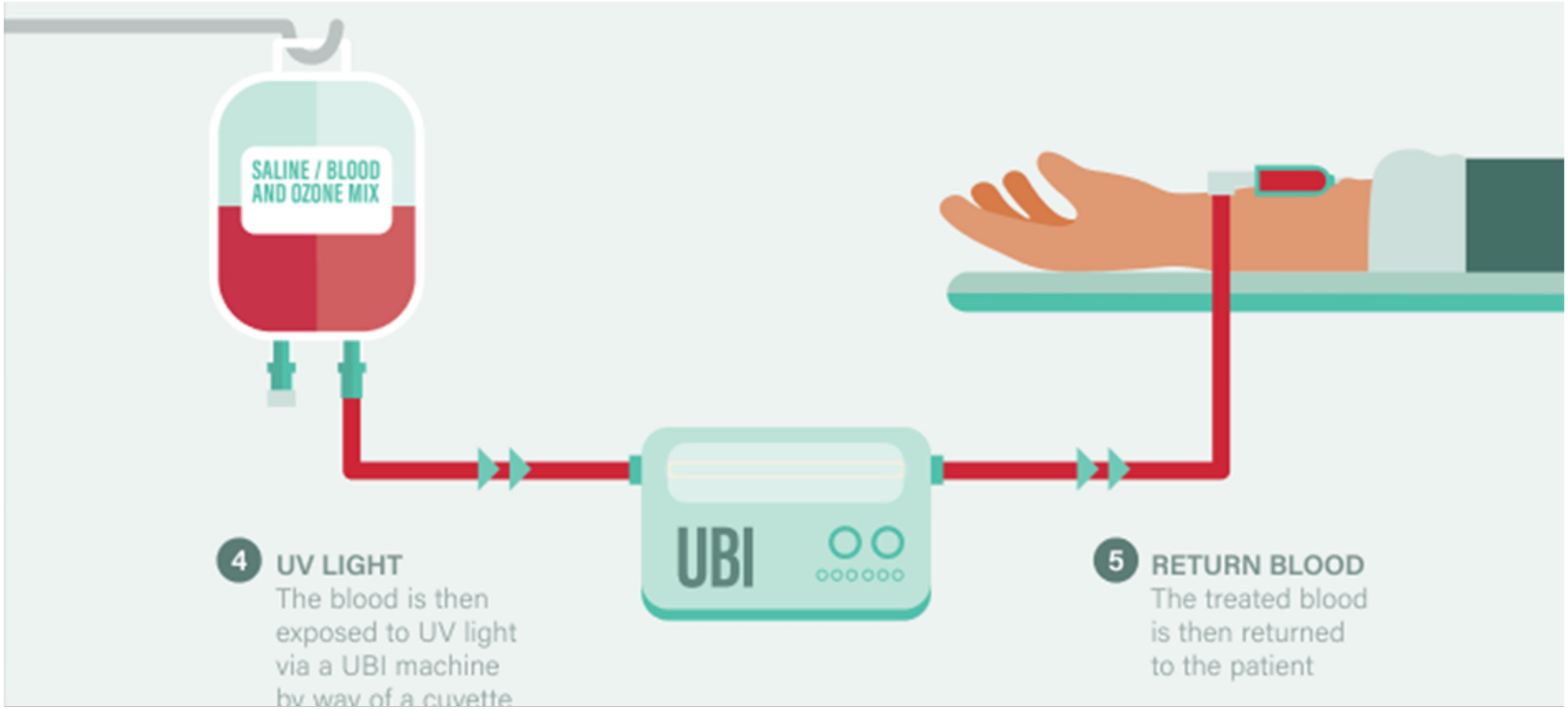


The Resurgence of UBI Therapy

Invisible Cure is about Ultraviolet Blood Irradiation (UBI). It is a simple therapy with a 90-year history of both efficacy and safety. Stories and studies have been presented to bring the reader the latest knowledge on the usage of this valuable therapeutic tool.

www.invisiblecure.com

Ozone and UV Light Therapy


SALINE / BLOOD
AND OZONE MIX
UBI
4 UV LIGHT
The blood is then
exposed to UV light
via a UBI machine
by way of a cuvette
5 RETURN BLOOD
The treated blood
is then returned
to the patient

The Equipment and Cuvettes

Contraindications

- Same as ozone +
- Photosensitivity
- Sulfa Drugs

Factors for Efficacy

Equipment

- Light type – UVA, UVB, UVC, Full Spectrum

Disposable

- Quartz Glass
- Length of cuvette
- Turbulator

Delivery Method

- 220 mL total liquid volume (60:160)
- Drip rate

Why UBI?

Pros

- Minimal equipment w/great training support.
- Less Herxing
- More efficacy
- Safe/effective
- Lots of research and studies

Cons

- No UBI
- Basic

Equipment Needed

- Ozone generator <40-70 gamma
- UBI machine
- Additional tubing (cuvette)

10 Pass

Overvierw

- Dr. Lahodny from Austria is the developer of the 10-pass method
- It has gained traction in the US over the last 15 years
- It is effective on the “hard to treat” issues
- Same indications and contraindications
- Equipment runs 30K-40K + 5k in training
- Time to administer 1 ½ - 2 hours
- Cost to patient $1,000+

Hermann Protocol

- 200cc of blood is drawn into a 250ml hyperbaric bottle (1000 units heparin)
- Ozone is infused into the bottle (40-70 gamma)
- Blood is reinfused to patient
- This is repeated **10x** in a row, hence the name 10 pass
- 140,000 mcg of ozone in 10 passes
- 10,000 units of heparin
- $300 in supplies

Zotzmann Protocol

- The Zotzmann creates a vacuum within a sterile 250cc glass vacutainer which gently draws blood from the vein.
- When the glass vacutainer is full the Zotzmann pushes a specific amount and concentration of ozone into the vacutainer to be mixed with the blood.
- The Zotzmann creates gentle pressure inside the glass vacutainer to move this ozonated blood from the vacutainer back into the vein.
- This cycle is repeated ten times and considered one session.
- The entire session lasts between 1.5 to 2.5 hours.

Why 10-Pass?

Pros

- High Dose Ozone
- 2L Blood Treated
- Great reputation with hard-to-treat conditions
- Hyperbaric ozone theory
- Makes ozone for any use

Cons

- Cost of equipment
- International supply/import issue
- Limited training or equipment support
- High maintenance for staff
- No UBI

Equipment Needed

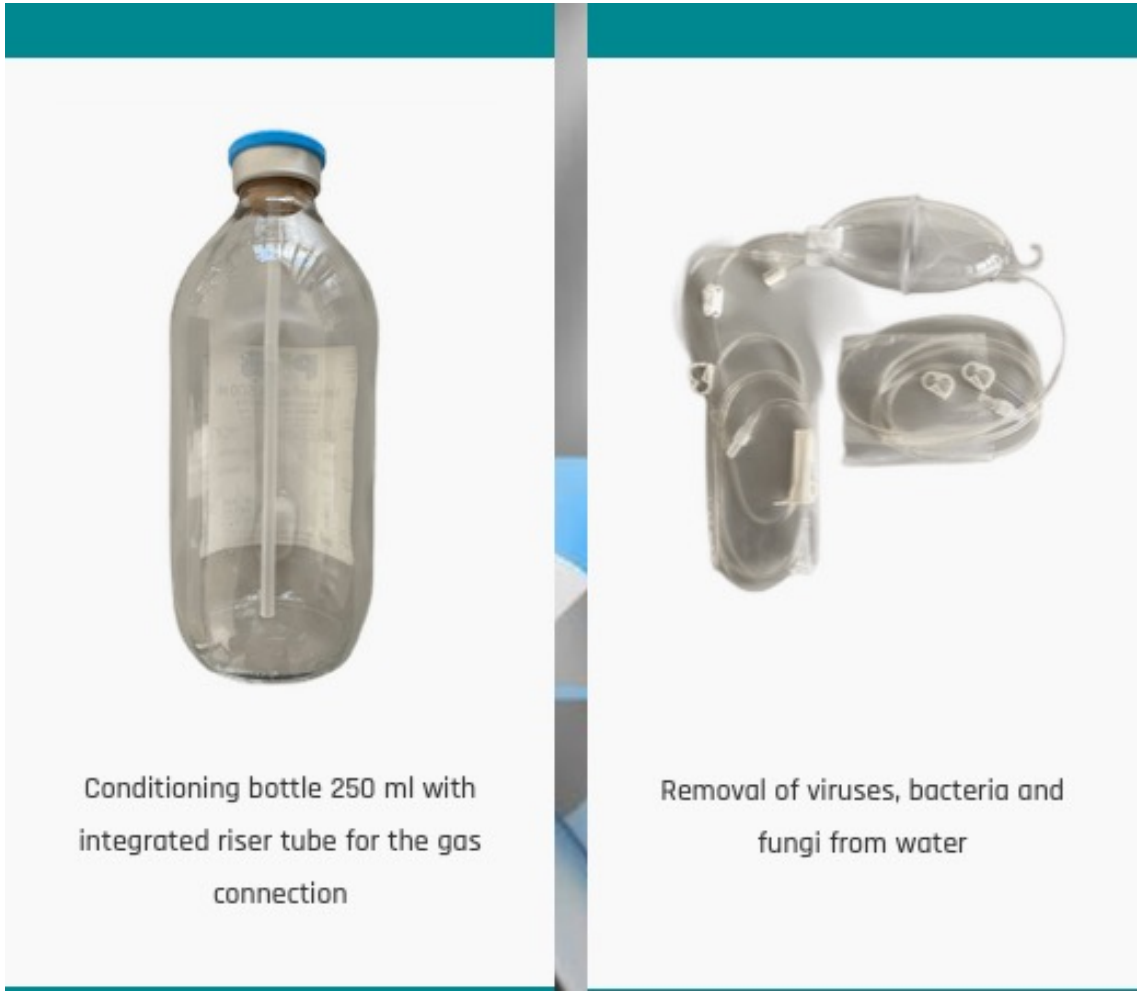
- Zottsman or Hermann
- Specialty consumables

10-Pass Equipment Websites

https://ozontherapie.de/ozone-therapy/?lang=en

https://www.aquapro3.com

https://www.h-a-b.de/en/ozone/



Auto HD Ozone/UV

Overview

Patients

- Automated procedure does not change indications for O3UV
- Chronic and acute conditions
- Elite performers looking for an edge
- Optimization/ regenerative/ longevity

Clinical Practices

- Automating IV process increases staff efficiency and saves time/energy
- Additional revenue source

What is Auto Hi-Dose O3UV?

- Automated O3UV Process
  - Draw and return of blood and heparin
- 300mL of blood at once
- 3000 units of heparin continual drip
- High dose of ozone
  - 70,000 mcg of ozone is added all at one time (70 gamma x 1L)
- Includes **TWO** UBI treatments
- Simple for staff

Talking Points About Comparison

- Less blood (1:4 ratio)
- Less Heparin
- Less time drawing blood
- Half the ozone of 10-Pass
- But double the UBI
- Reduced admin time
- Reduced cost to clinic and patient
- Same outcomes

The Equipment from O3UV.com

- UV Champion Full Spectrum
- O3 Generator (w/regulator)
- Infusion Pump
- Syringe Pump
- Hi-Dose Cuvette and Bag
- 4’ Silicone Tubing

Which ozone generator do you have??
60-70 mcg/mL at ¼ L/m

Why Auto HD Ozone UV?

Pros

- High Dose Ozone
- Less blood needed
- Great reputation with hard-to-treat conditions
- Cheaper than 10-pass
- Easy to implement and train

Cons

Equipment Needed

- Ozone Generator
- UBI Machine
- Specific disposable (cuvette) - $55
- Infusion and syringe pumps

Are there any questions?

EBOO

What is EBOO?

Extracorporeal Blood Oxygenation and Ozonation

- Started in Malaysia 22 years ago
- Elevating Major Autohemotherapy
- Low concentration of ozone
- Treating more blood at once
- Repurposing dialysis filter

EBOO Origin Story

- Dr. Velio Bocci was the first to receive an EBOO treatment in 1993
- Tests were conducted to determine the optimal concentration of ozone and ozone compatibility with dialysis filter materials
- 3 mcg/ml was determined to be the optimal concentration
- Malaysians started building EBOO Machines in 2002
- Studied mostly HIV patients and then cardiovascular conditions

EBOO in 2024

ALL EBOO

- EBOO has proven to be significant clinical tool for wellness, athlete and disease patients alike.
- Adds a significant amount of ozone through a large surface area to treat 2L of blood in 50 minutes – dialysis filter repurposed
- Peristaltic Pump
- Collection Cup
- Bilateral Access

ADDITIONS

- UBI therapy - Full Spectrum and UV lights.
  - There is synergy between UBI and ozone therapies
  - LED source
- EBO2 – light source added (different than UBI)

EBOO in 2023

Procedure and Equipment

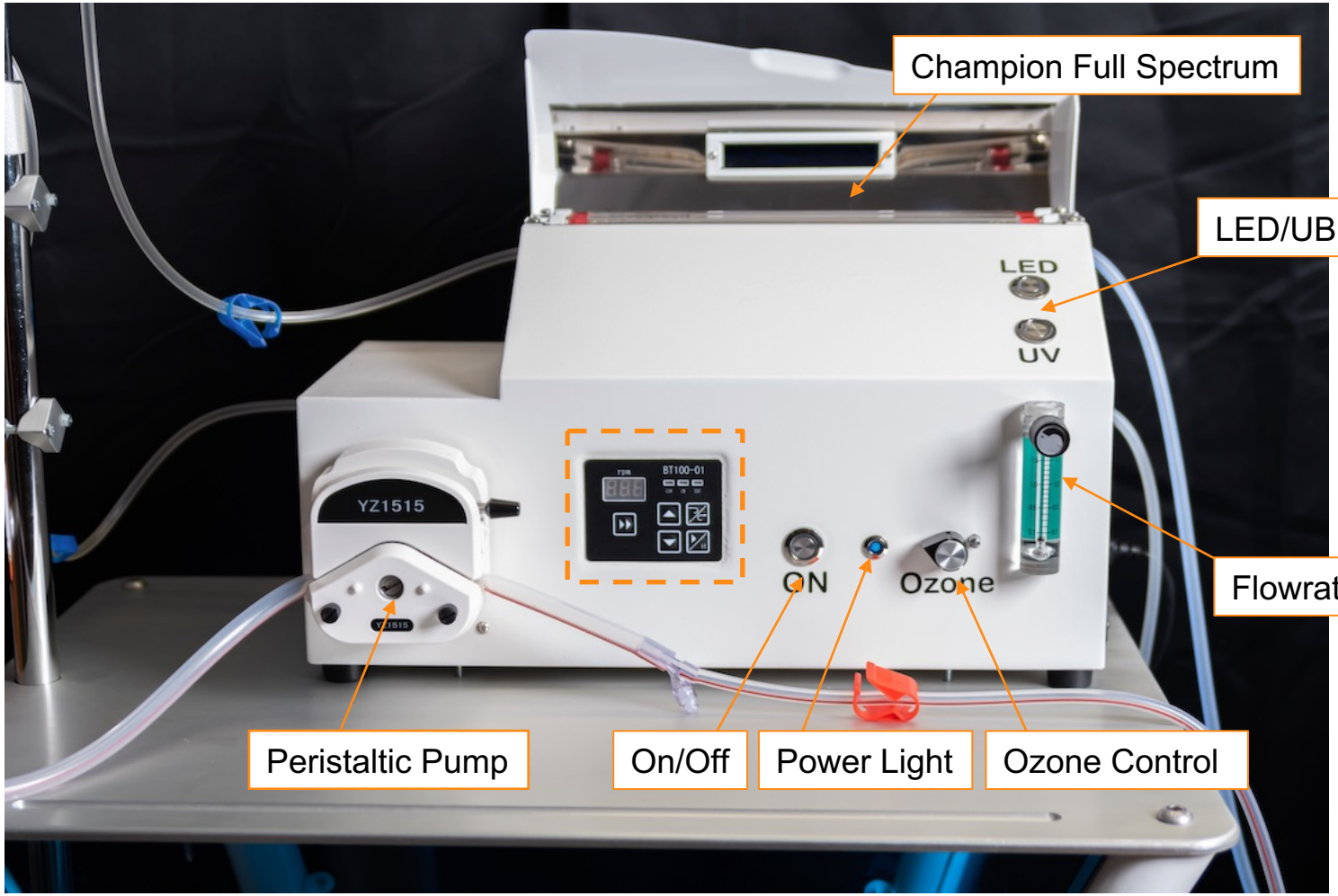
Basic EBOO

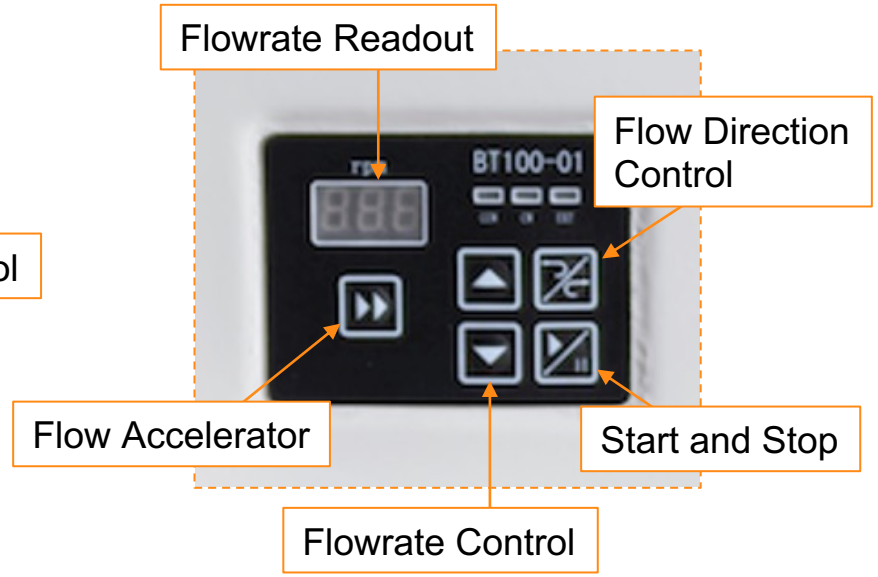
- Treats 2L of blood (in 50 minutes)
- 150,000 mcg of ozone
- ~3 mcg/ml (gamma) of ozone

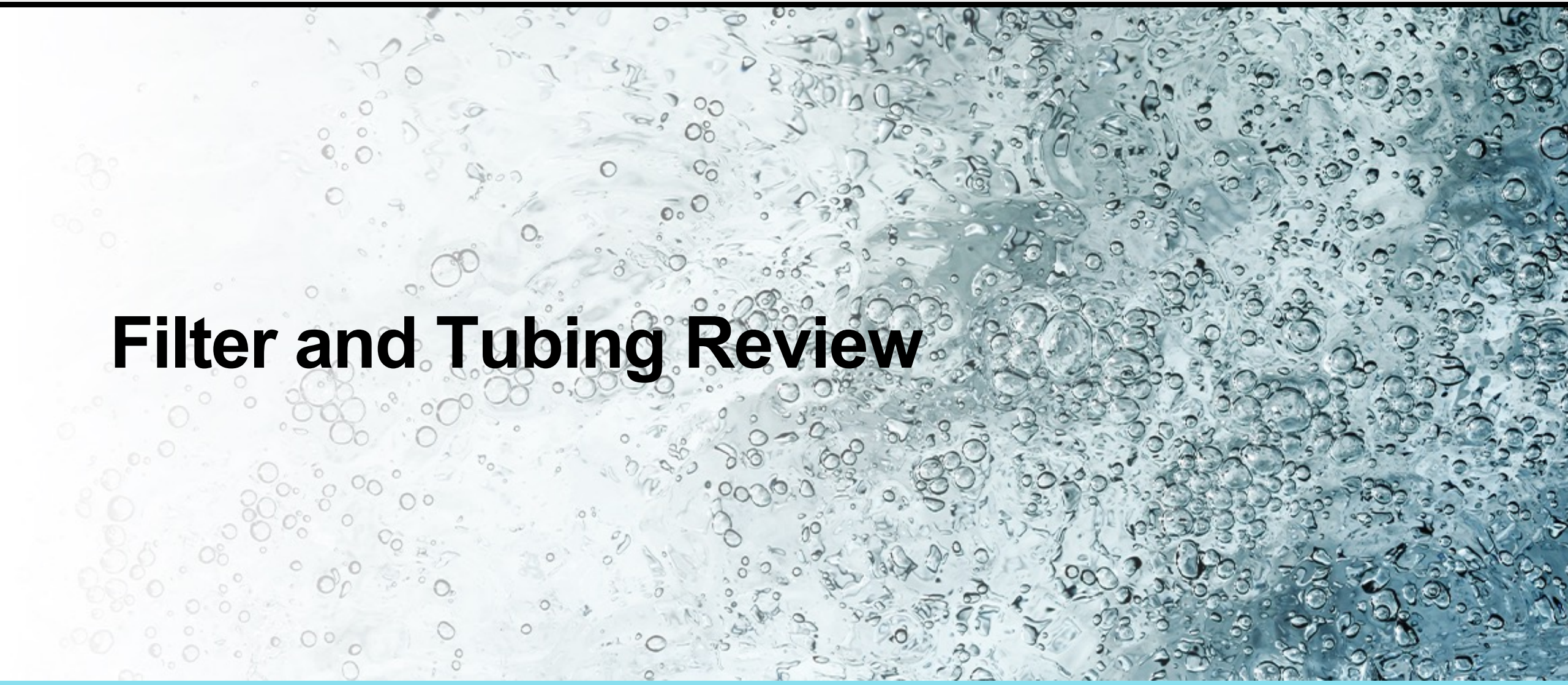
- Two 18-20 gauge catheters placed
- Blood drawn by peristaltic pump at 40ml/min
- Blood and ozone meet in a repurposed dialysis filter
- Blood “waste” or water flows to collection cup
- Unused ozone continues to flow to ozone destruct
- Treated blood flows back to patient

*500ml of saline and 7500 units heparin dripping simultaneously

EBOO Full Spectrum Review





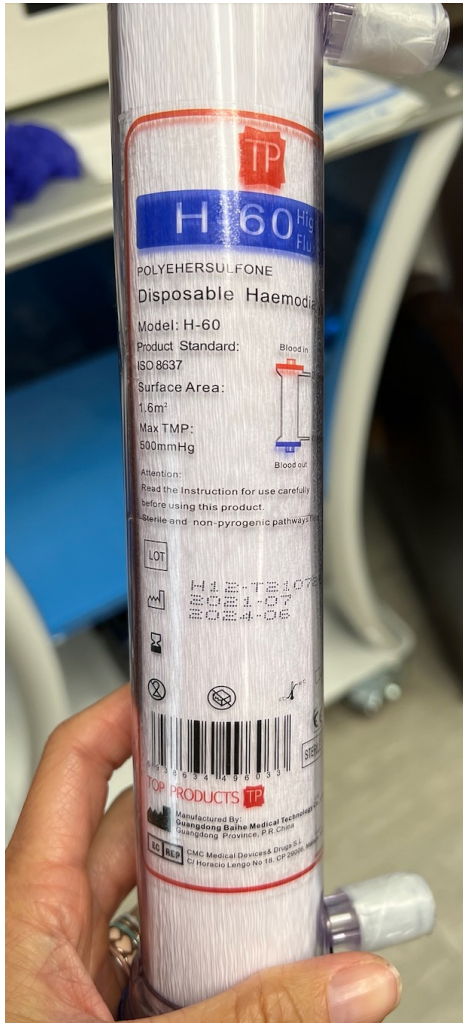


Filter and Tubing Review

Filter

- For now, always dialysis filter, repurposed
- Two types of materials
- Different sizes
- Large surface area of blood meets ozone – most efficient MAH

- Untreated blood enters the side-bottom
- Ozone comes in the top, enters straws
- Treated blood exits the side-top
- Pressurized
- Hangs above collection cup
- Cellular waste drips down to collection cup



Inside the EBOO Diffusing Filter

Collection Cup

- EBOO collection cup fluid should be clear
- Varying amounts of fluid:foam
- Varying from tx to tx
- Yellow: likely has erythrocytes and proteins
- Red: LYSING

Why EBOO?

Pros

- Low concentration/High dose
- 2L Blood Treated
- Greater Diffusion of ozone into blood
- Most sophisticated MAH
- Save time with EBOO
- ROE

Equipment Needed

- EBOO Full Spectrum
- EBOO
- EBO2
- Ozone Generator, Peristaltic Pump, and UBI device

Cons

- Cost of equipment
- Cost of procedure for patient
- Bilateral access needed
- 1 on 1 procedure

Comparing Therapies and Doses

Ozone Doses Being Used

DOSES CATEGORIZED	
Manual Standard	< 3,000 mcg – 10,000 mcg
Manual Hi-Dose	10,000 mcg – 25,200 mcg
HD Ozone/UV	70,000 mcg – 87,500 mcg
Ten-Pass Ozone	140,000 mcg
Malaysian EBOO	150,000 mcg
Purita EBO2	150,000 mcg
EBOO Full Spectrum	150,000 mcg

Comparing High-Dose O3UV Therapies

	HIGH-DOSE	10-PASS	EBOO Full Spectrum
Amount of Blood Treated	300mL	2,000mL	2,000mL
Dose	70,000 mcg	140,000 mcg	150,000 mcg
Concentration	70 mcg/mL	70 mcg/mL	3 – 40 mcg/mL
Volume	1 L	2 L	~ 2 L
Utilizes UV Light	Yes	No	Yes
Ozone Diffuser (filter)	No	No	Yes
Treats a Myriad of Conditions	Yes	Yes	Yes
Avg Number of Treatments for effectiveness	5 – 10	5 – 10	1 – 3
Time to administer	60 Mins	90 Mins	50 Mins
IV Catheter	20G	18G	One 18G, One 20G

Patient Requirements

Qualifying Your Patient for Any Ozone IV

- Has two good veins to access
- Has been educated on the procedure
  - Risks/benefits
  - Expectations have been set
  - Signed consent to treat
- Does not have any contraindications
- Has healthy vitals
- No allergies to heparin or other anti-coagulant
- Can tolerate saline or other carrier
- Reasonable blood pressure
- Low O2 OK

Layering Different Therapies

Achieve Greater Outcomes

When looking at ozone therapies I would say that thinking localized and then systemic would be the best approach for trying to figure out your plan of action with each patient. Here are some examples

- Shoulder injury – Ozone injection, and O3UV IVs
- Severe burn – Limb bag, ozone oil applied topically and O3UV IVs
- Female with chronic condition – vaginal ozone 3 times a week, rectal ozone 4x, and O3UV IVs

MedMasters Memberships

PRO

Single therapy education, training, and more

$250

Per Month Per Clinic

Full Access To ONE Vaults

10% Discount Off All Trainings

Live Q&A Access with Kim Look

One Hands-On Virtual Training

Access To Monthly Webinar/Training

Monthly Newsletter

BEST DEAL

ELITE

Get full access to ALL vaults

$485

Per Month Per Clinic

Full Access To ALL Vaults

20% Discount Off All Trainings

Live Q&A Access with Kim Look

One Hands-On Virtual Training

Access To Monthly Webinar/Training

Monthly Newsletter

Go to **www.MedMasters.org** to register.

Vicki Lintemuth
vicki@medmasters.org
517-282-9772