



MedMasters
MASTER THE ART OF HEALING

FUNDAMENTAL OF IV OZONE

PRESENTED BY: KIM LOOK



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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.





TOTAL

- Started training in 2014
- Trained approx. 2,143 practitioners in Ozone and UV
- Trained 695 clinics in Ozone and UV
- 793,000 therapies administered
- Clinicians in 13 countries

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

About Us



MedMasters Memberships



BASIC

Just get into the system and start your journey

FREE

Access to Limited Materials

Monthly Newsletter

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PRO

Single therapy education, training, and more

\$250

Per Month Per Clinic

Full Access to ONE Vault

15% Discount Off Trainings / Events

Access to Monthly Webinars / Trainings

Monthly Newsletter

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BEST DEAL

ELITE

Get full access to ALL vaults

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Per Month Per Clinic

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20% Discount Off Trainings / Events

Bonus Monthly Education / Marketing Piece

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Go to www.MedMasters.org to register.

Certification



We are happy to issue certificates of EBOO training as soon as you have completed the virtual courses AND the live onsite EBOO training with our MedMaster's trainer. If you have any inquiries about certification, please contact our Training Coordinator, Vicki Lintemuth.

vicki@MedMasters.org



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

Patients are not receiving the best outcomes possible.

PROBLEM

2

Clinics are not as profitable as they should be and it's challenging when trying to scale your business.

PROBLEM

3

Staff training, competence and compliance (engagement)



Ozone Basics



What is Ozone?



- Naturally occurring
- Industrial use
- Dental use
- Veterinary Use
- Medical use



Industrial Uses of Ozone



- Odor removal – as in smoke smell removal
- Pesticide removal – breaks down the toxin
- Waste water treatment -
- Drinking water treatment – purification
- Disinfectant
- Food processing and food storage
- Swimming pools and spas
- Aquariums
- Air treatment



Medical Ozone History



Medical Ozone History



- Used medically since the early 1900s
- Suppressed in the US as pharmaceuticals were issued
- Germany continued development - ozone generators and medical applications
- 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.



How Energy is Carried



Ozone

- Instantly reacts with blood products (albumin/lipids)
- Measured by concentration and dose

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Medical Ozone



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 fibrinolytic activity.
- Immune-modulating effects
 - Low ozone concentrations promote the accumulation of ozonides on the membranes of phagocytic cells –monocytes and macrophages. Due to ozonides these cells stimulate the cytokines synthesis of different classes. Cytokines being biologically active peptides, contribute to the further activation of non-specific defense and, apart from it, they activate cellular and humoral immunity. All together they facilitate the treatment of secondary immune-deficiency.
 - High concentrations produce aggravating effect on the processes of lipid peroxidation in cellular membrane of the same phagocytic cells with the accumulation of the toxic and hard products of lipid peroxidation (malon dealdehyde and Schiff bases), which inhibit cytokines synthesis and thus eliminate the activation of T-helpers lymphocytes, aimed at regulation of immune globulin generation by B-lymphocytes. This effect is used in the management of patients with autoimmune pathology

Medical Ozone in the Research by Dr. Velio Bocci



- Optimization of pro- and antioxidant systems
- Hormetic effect – stress to body that then creates secondary benefit
 - Optimization of pro- and antioxidant 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

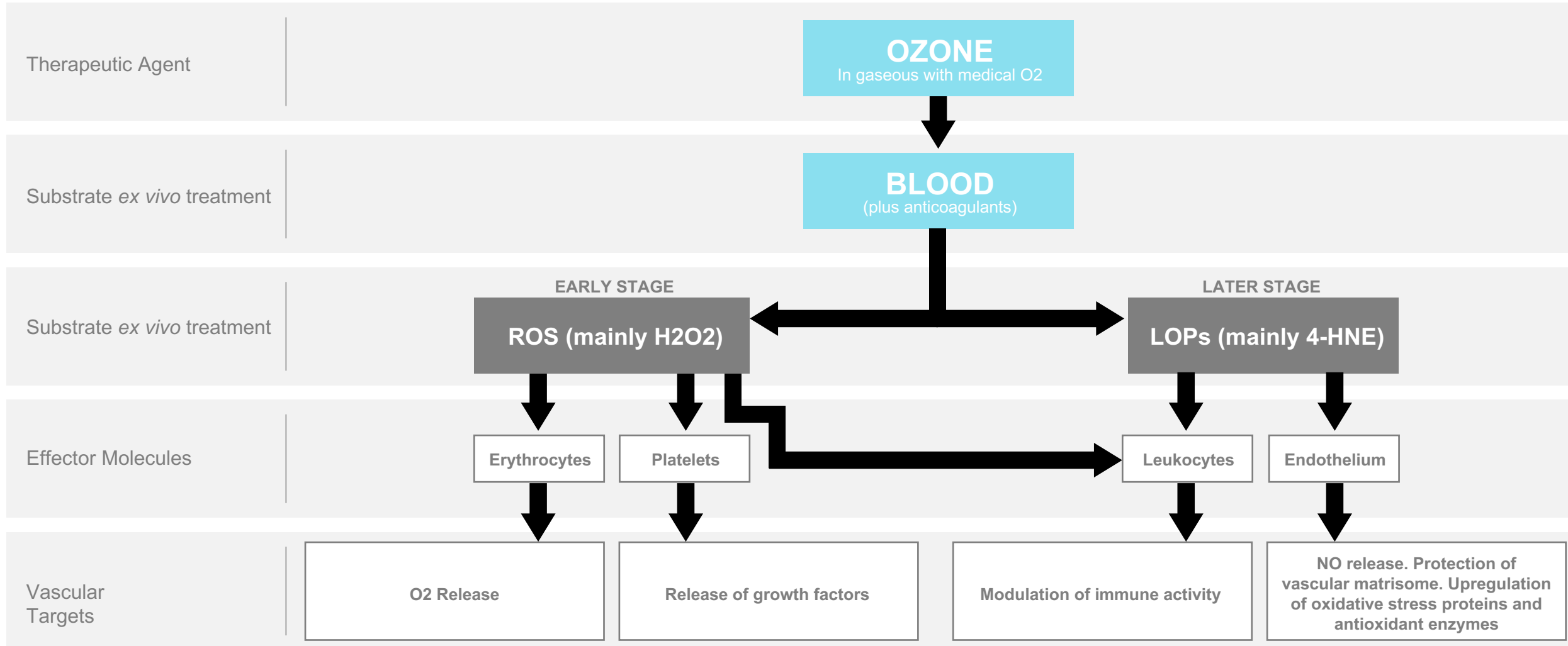
By: Ruhi Cakir



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 H₂O₂
 - Increases alkoxy radicals
 - Increase SOD, NO, CO and bilirubin
 - Increases GSH peroxide 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 2013 Reviewed: December 2nd 2013 Published: May 28th 2014

General Aspects of Ozone Therapy



Nrf2 Activation



Now we know (since 2011) that ozone trigger the Nrf2 system with the final formation of antioxidant proteins at the nucleus level. Nrf2, via activation of EpRE, regulates the expression of proteins that collectively favor cell survival.

Nrf2 system contributes to protection against various pathologies, including carcinogenesis, liver toxicity, respiratory and chronic inflammatory diseases, neuronal ischemia and renal problems and this can be achieved either way: with AHTMajor or with ozonized saline solution.

NrF2 Effects

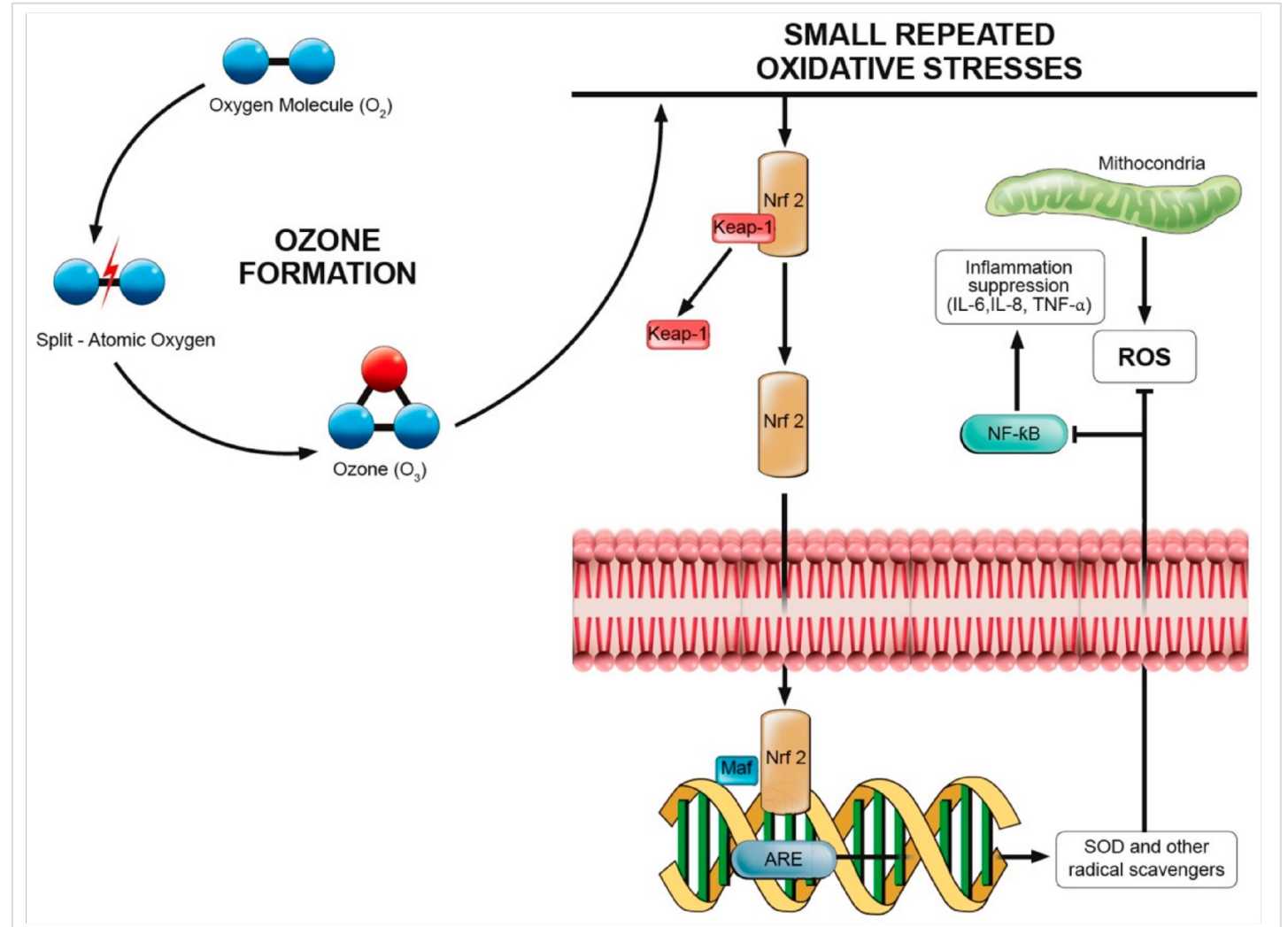


- Ozone > H₂O₂ > Ozone messengers > Nrf2 stimulation
- Stimulates body's natural mechanism for creating antioxidants
- Phase II detoxification enzymes
- Reduce systemic inflammation
- Lowers oxidative stress
- Improves mitochondrial function
- Reduces pain
- Pivotal regulator of stem cell self-renewal, proliferation, and differentiation.

Pathways Involved in Inflammation and Oxidative Stress



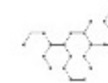
Ozone (O₃) formation mechanism and intracellular and intranuclear pathways involved in inflammation and oxidative stress.



Benefits of Medical Ozone by Velio Bocci

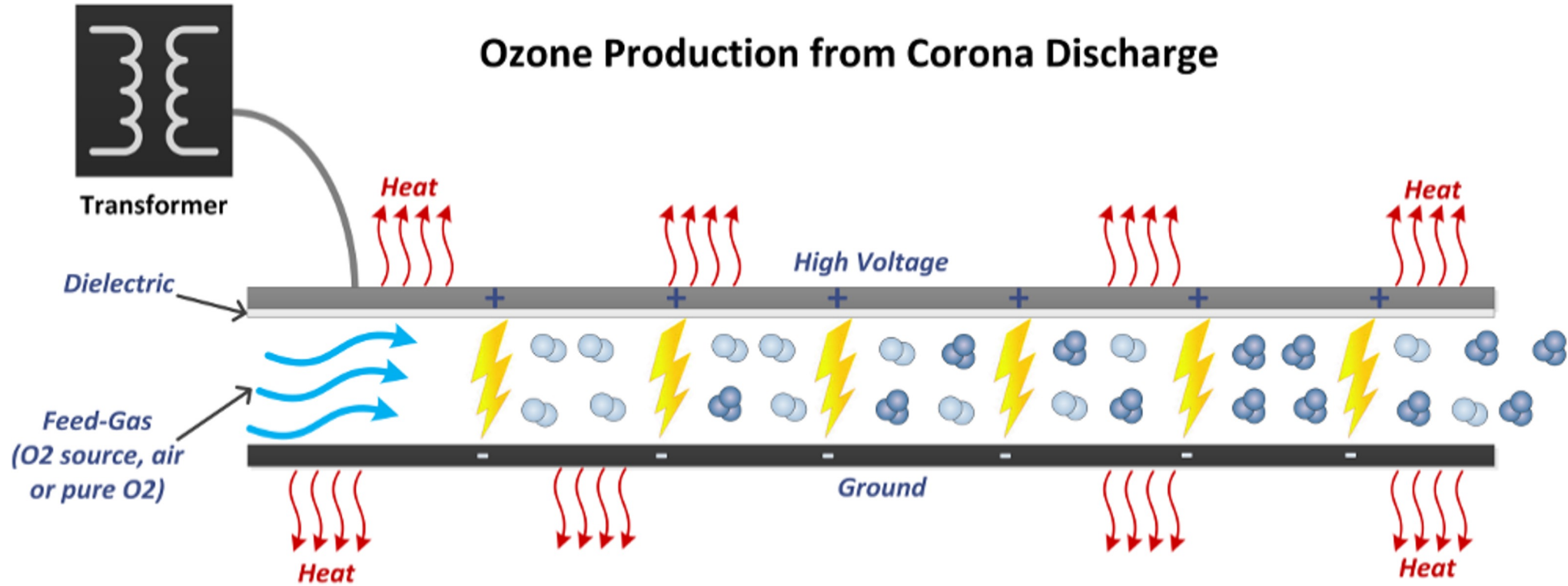


- An essential tool for 130+ disorders
- It works on chronic and autoimmune disorders
- It's quick with little to no side effects
- Very inexpensive
- Over 100-year history
- It's effective when other medicines failed
- Over 40,000 physicians use it



molecule of **Ozone**
3D Illustration

Producing Medical Ozone



Ozone is formed via an electrical discharge that is diffused over an area using a dielectric to create a corona discharge. Oxygen passed through this corona discharge is converted to ozone.

How To Determine Concentration



O₂ flow rate X intensity of electrical spark = concentration

Oxygen



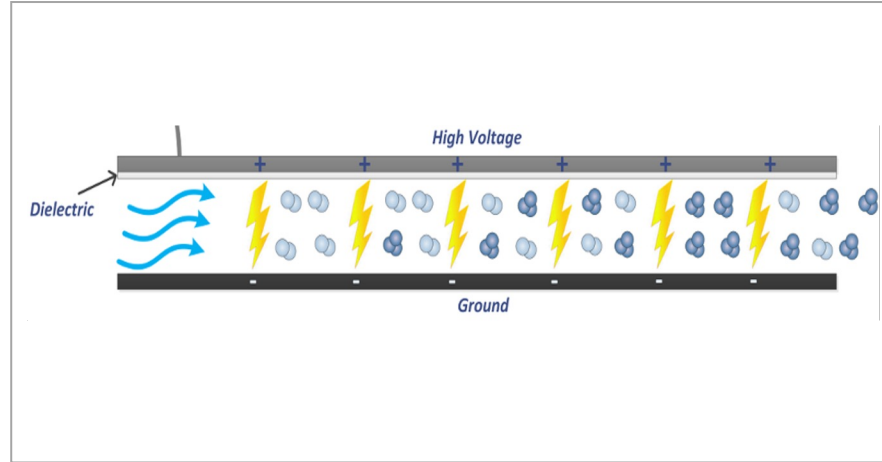
Regulator for
O₂ Speed



Ozone Machine
Intensity Control



Ozone Generator



= Concentration

Measurement of concentration
1 gamma or 1 mcg/ml

Concentration Designations for Ozone



- Mcg/ML
- Gamma – slang term used primarily in the US
- Both of these 70 gamma and 70 mcg/ml are the same
- Think of CC and ML as an example here
- Regardless, this only measures the concentration of Ozone only



Formula for Calculating a Dose of Ozone

Concentration x Volume = Dose

Example:

70 gamma x 60ml = ?

57 mcg/ml x 120ml = ?

Answer:

4200 mcg

6840 mcg

Determining Ozone Dose

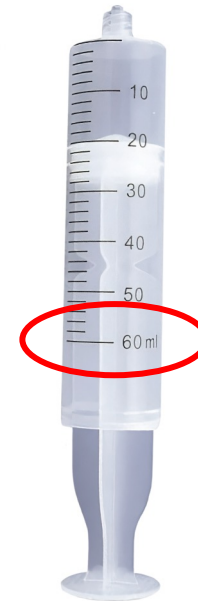


Dose: concentration x volume

Example: 70 mcg/ml x 60ml = 4200 mcg

	Power Mode									
O2 LMP	1	2	3	4	5	6	7	8	9	10
1	7	8	9	11	12	13	14	15	16	17
3/4	9	11	13	15	16	17	18	20	21	23
1/2	14	17	20	22	24	26	27	29	30	32
1/4	25	30	34	39	42	45	48	51	53	56
1/8	41	47	52	56	60	63	66	69	70	73
1/16	57	64	68	73	77	79	81	83	85	88
1/32	71	75	78	82	86	88	91	93	95	100

X



= 4,200 mcg

How to Calculate Volume with Liter Flow



- **You may need to know this for Hi-Dose procedures and EBOO**
- Oxygen flow rate will give you this information
- 1/4 L/m (liter per minute)
- Every 4 mins you have 1 liter of Ozone
- Now you have your volume amount to use with your formula
- $70 \text{ mcg/mL} \times 1000\text{mL} = 70,000 \text{ mcg}$
- $5 \text{ mins} = 1250 \text{ mL of ozone} - 70 \text{ gamma} \times 1250 \text{ mL} = 87,500 \text{ mcg}$

Ozone Doses Being Used



Recommended Ozone Doses for MAHT	
AAOT (USA)	3,000 μg
German Low-Dose Manual	4,000 μg
Madrid Declaration	6,000 μg
Russian Ozone in Practice	9,000 μg
HI-Dose Ozone with UBI 2x	70,000 μg
10 Pass (USA)	140,000 μg
EBOO	150,000 μg



What is Half Life?

- The time that it takes for ozone to
- become $\frac{1}{2}$ of its initial strength

Factors

- Temperature
- Humidity
- Is it a gas or in a liquid



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 for Ozonel



- 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**



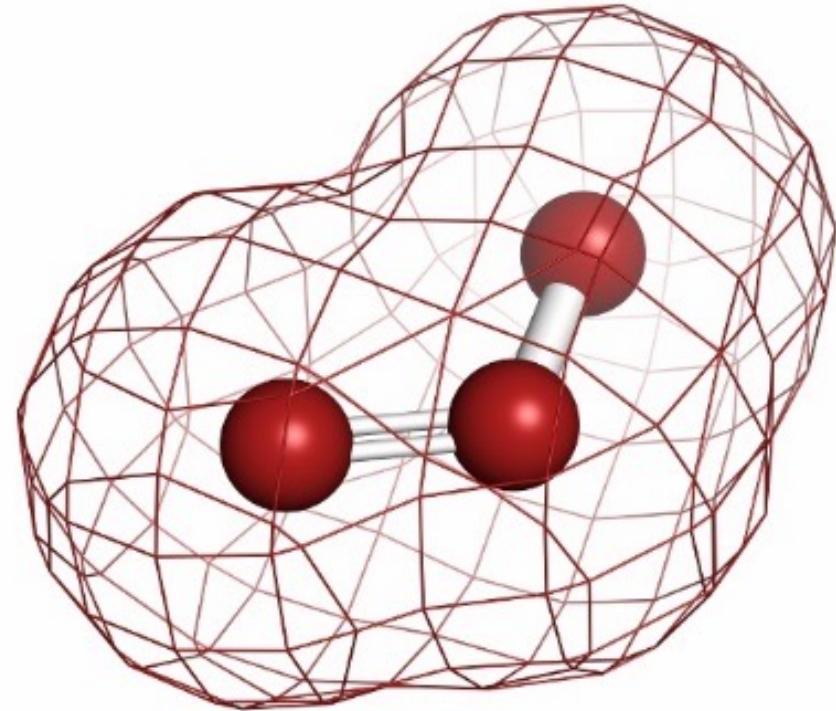
Methods of Medical Applications



14 Ways To Administer Ozone



1. DIV
2. Ozonated Water
3. Saline IV
4. Creams and Topical Oils
5. Ozone Sauna
6. Minor Autohemotherapy
7. Major Autohemotherapy
8. Insufflation
9. Limb Bagging /Cupping
10. Ozone Joint Injections
11. O3UV – Ultraviolet light with ozone IV
12. Hi-Dose O3UV
13. Ten-Pass
14. EBOO + EBO2



Case Study - Rash



All Things Ozone Class

(LIVE, VIRTUAL MASTERCLASS)



Join us at this live virtual training and learn the latest techniques and technologies to effectively administer ozone, including practical protocols to treat different health conditions and sports performance, discuss the essential equipment for ozone therapy, and provide insights on accurately calculating concentrations and doses.

What will you learn?

- Nebulizing ozone
- Ozonating water
- Ozonating oils
- Five types of insufflation
- Limb bagging
- Sub Q Injections
- Orthopedic Injections
- Minor Autohemotherapy
- Direct IV
- Major Autohemotherapy IV (with UV)
- Standard, Hi-dose, and 10-pass methods

Register at www.medmasters.org/training





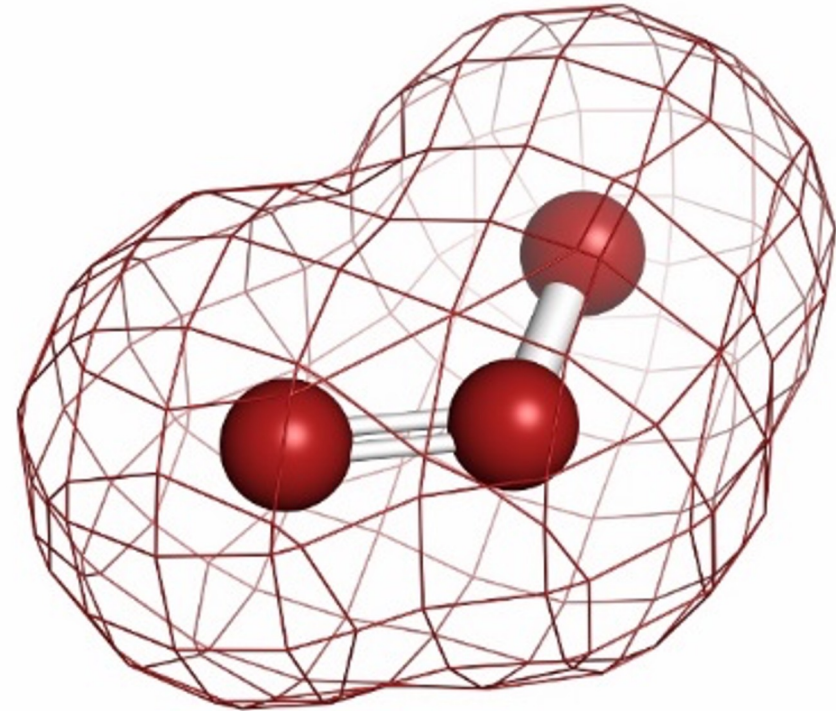
Methods of IV Application



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 Full Spectrum





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



**Not recommended by Aaot
nor Madrid Declaration**

Major Autohemotherapy (MAHT)



- Remove 50 - 300 cc of blood
- Ozone is added
- Reinfuse



Ozonated Saline IV





Ozone and UBI IV





Ten-Pass





EBOO and EBO2



Ozone Guidelines



IVS	40 – 70 mcg/mL
Blood: Ozone	1:3 ratio

Titration Protocol: Examples



O3UV Titration Guidelines for Stage III Disease

For Chronically Ill, Late Stage, or Sensitive Patients

STANDARD O3UV PROCEDURE					
Treatment	Ozone Dose (mcg)	Blood (mL)	Ozone (mL Mcg/mL)	Normal Saline (mL)	Saline Bag (mL)
Treatment 1	3,000	60	60 50	160	250
Treatment 2	3,600	60	60 60	160	250
Treatment 3	4,200	60	60 70	160	250
Treatment 4	8,400	60	120 70	160	250
Treatment 5	12,600	60	180 70	160	500
Treatment 6	25,200	120	360 70	100	500

HI-DOSE PROCEDURE

Use pumps, 1,500mL Hi-Dose Bag, and Cuvette

Treatment	Ozone Dose (mcg)	Blood (mL)	Ozone (mL Mcg/mL)	Saline Bag (mL)
Treatment 7	70,000	300	¼ L/min for 4 min 70	250
Treatment 8	87,500	300	¼ L/min for 5 min 70	250

Repeat Treatment 8 one to two times per week.

OZONE CONCENTRATION AND DOSE TERMINOLOGY

- Mcg/mL = Concentration
- Gamma = Concentration
- Mcg = Dose
- Ug = Dose

O3UV Titration Guidelines for Stage II Disease

For High-Functioning Sick Patients

STANDARD O3UV PROCEDURE					
Treatment	Ozone Dose (mcg)	Blood (mL)	Ozone (mL Mcg/mL)	Normal Saline (mL)	Saline Bag (mL)
Treatment 1	4,200	60	60 70	160	250
Treatment 2	12,600	60	180 70	160	500
Treatment 3	25,200	120	360 70	100	500

HI-DOSE PROCEDURE				
Use pumps, 1,500mL Hi-Dose Bag, and Cuvette				
Treatment	Ozone Dose (mcg)	Blood (mL)	Ozone (mL Mcg/mL)	Saline Bag (mL)
Treatment 4	70,000	300	¼ L/min for 4 min 70	250
Treatment 5	87,500	300	¼ L/min for 5 min 70	250

Repeat Treatment 5 one to two times per week.

O3UV Titration Guidelines for Stage I Disease

For Healthy, Optimized Patients

STANDARD O3UV PROCEDURE					
Treatment	Ozone Dose (mcg)	Blood (mL)	Ozone (mL gamma)	Normal Saline (mL)	Saline Bag (mL)
Treatment 1	8,400	60	120 70	160	250

HI-DOSE PROCEDURE				
Use pumps, 1,500mL Hi-Dose Bag, and Cuvette				
Treatment	Ozone Dose (mcg)	Blood (mL)	Ozone (mL Mcg/mL)	Saline Bag (mL)
Treatment 2	87,500	300	¼ L/min for 5 min 70	250

Repeat Treatment 2 one to two times per week.



Ozone Equipment



What Do I Need?



GENERATOR

+



OXYGEN

+



REGULATOR



ACCESSORIES



Case Studies



Our Own Experiment: Quick and Unexpected Results



- Jess
 - Toddler and infant
 - Full-time job
 - Very health conscious
 - Felt great before
 - Astigmatism



Synergistic Therapies In O3UV 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 antioxidant 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

Conclusion – Benefits of Ozone and UV



- 695 clinics
- Less Herxing
- More efficacy
- Safe/effective

- Triple IV business
- Treat more conditions
- Root-cause therapy
- Wellness AND sickness

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- **Training Vault**
 - Studies/Data
 - List of Supplies
 - Instructions
 - Patient Edu Material
 - Marketing Material
 - SOPs and Consent Forms
- **Monthly Webinar**
- **FREE 15 min calls w/ trainer**