

RECTAL INSUFFLATION PROTOCOL

WHO CAN BENEFIT?

- 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
- Any Autoimmune Disorder (Lyme, EBV, RA, etc.)
- Oncology Patients
- Chronic Infections
- Herpes I and II
- Decubitus Ulcers
- Macular Degeneration
- Ulcerative Colitis
- Skin Issues
- Anyone that wants to improve their immune response, improve their oxygen uptake, and improve circulation

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

DIFFERENT WAYS TO ADMINISTER

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.

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 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.

PROTOCOLS

Low and Slow Approach

- 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 and 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

Pediatric Ranges

Volume:

- 1-11 months - 15 - 20 mL
- 1-3 years - 20 - 35 mL
- 3-10 years - 40 - 75 mL
- 11-15 years - 75 - 120 mL

Pediatric Protocol

- Week 1: 10-20 gamma at their appropriate age-related volume
- Week 2: 15-25 gamma at their appropriate age-related volume
- Week 3: 20-30 gamma at their appropriate age-related volume
- Week 4: 25-35 gamma at their appropriate age-related volume
- Continue at week for total for concentration and age-related volume

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 or 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
- Knowledge Transfer/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