

# Holistic Management with Ozone Therapy and Meyers Cocktail for Low-Grade Non-Invasive Bladder Carcinoma: A Clinical Case Report

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## Abstract:

**Background:** Bladder cancer, as of 2018, affected about 1.6 million people globally with 549,000 new cases and 200,000 deaths. Age of onset is most often between 65 and 84 years of age. Bladder cancer is any of several types of cancer arising from the tissues of the urinary bladder. Symptoms include blood in the urine, pain with urination, and low back pain. It is caused when epithelial cells that line the bladder become malignant. Despite conventional treatments, patients may experience debilitating symptoms and disease progression.

**Case Presentation:** A 66-year-old female with chronic fatigue, nocturnal frequency of micturition, and knee pain, alongside a history of low-grade bladder cancer, underwent integrative therapy at Nulife Wellness Centre. Treatment included high-dose Vitamin C, Meyers' Cocktail, and medical ozone therapy over three months. Despite the complexity of her condition, the patient demonstrated a remarkable improvement post-treatment. Symptoms alleviated, and the patient reported an enhanced quality of life. This multidimensional approach not only targeted symptom management but also aimed to enhance immune function and potentially impact disease progression.

**Conclusion:** Integrative therapies, such as high-dose Vitamin C and medical ozone therapy, offer promising avenues for symptom relief and improved well-being in patients with chronic conditions. This case emphasizes the importance of personalized, multidisciplinary approaches in comprehensive healthcare.

**Keywords:** Integrative medicine, Chronic fatigue, Nocturnal frequency, Knee pain, Bladder cancer, High-dose Vitamin C, Medical ozone therapy.

## Introduction

Bladder cancer, as of 2018, affected about 1.6 million people globally with 549,000 new cases and 200,000 deaths. <sup>[1]</sup> Age of onset is most often between 65 and 84 years of age. <sup>[2]</sup> Bladder cancer is any of several types of cancer arising from the tissues of the urinary bladder. <sup>[3]</sup> Symptoms include blood in the urine, pain with urination, and low back pain. <sup>[3]</sup> It is caused when epithelial cells that line the bladder become malignant. <sup>[4]</sup> This case report presents the clinical management and outcomes of a 66-year-old female patient with a complex medical history, including chronic fatigue, nocturnal frequency of micturition, bilateral knee pain, and a previous diagnosis of low-grade, non-invasive bladder cancer. The patient sought treatment at Nulife Wellness Centre, where an integrative approach combining conventional and complementary therapies was employed. The treatment regimen included high-dose Vitamin C therapy, Meyers' Cocktail, and various forms of medical ozone therapy. Over a three-month period, the patient experienced significant improvements in symptoms, highlighting the potential efficacy of these integrative therapies in managing multifaceted health concerns. This case underscores the importance of personalized, multidisciplinary approaches in addressing complex medical conditions.

## Case Presentation

### Patient Profile:

A 66-year-old female patient presented to Nulife Wellness Centre in Alwarpet, Chennai, under the care of Dr. Arul K. She has a medical history of low-grade non-invasive bladder cancer, diagnosed in 2019 after experiencing bleeding while passing urine, and suffers from osteoarthritis in both knee joints and cervical spondylitis. Over the past year, she experienced significant fatigue, and for the past three months, she noted an increased frequency of nocturnal urination. Additionally, she reported persistent pain in both knee joints for the last year.

Upon her initial assessment, her vital signs were stable, with a blood pressure reading of 120/80 mmHg, a pulse rate of 84 beats per minute, and an oxygen saturation level of 98%. Laboratory tests revealed a ferritin level of 68 ng/mL, C-reactive protein (CRP) at 3.22 mg/L, immunoglobulin G (IgG) at 1410 mg/dL, immunoglobulin E (IgE) at 938 IU/mL, lactate dehydrogenase (LDH) at 229 U/L, and a notably low 25-Hydroxyvitamin D (25 OHD) level of 4.0 ng/mL.

### Ongoing Treatments:

The patient underwent several therapies and supplementations, including high-dose Vitamin C infusion, Meyers' Cocktail, and various forms of medical ozone therapy.

**High Dose Vitamin C Infusion** was administered intravenously at a dosage of 40 grams twice weekly. The mechanism of action involves Vitamin C acting as a pro-oxidant at high doses, generating hydrogen peroxide, which selectively kills cancer cells and supports the immune system while reducing inflammation. This therapy was intended to boost the patient's immune response and combat cancer cells. <sup>[5]</sup>

**Meyers' Cocktail** was given once every 15 days. This intravenous therapy comprises magnesium, calcium, B vitamins, and vitamin C, designed to boost immune function, increase energy levels, and aid in the recovery from illnesses. The combination of these nutrients helps in addressing nutritional deficiencies and supports overall health. <sup>[9]</sup>

### Medical Ozone Therapy and its Method of Administration:

**Major Autohemotherapy (MAHT)** was administered once a month. In this procedure, blood is drawn, mixed with ozone, and then reinfused into the patient. Ozone induces the release of growth factors that promote the regeneration of damaged tissues.

**Urethral Ozone** at 40 mcg/60 mL, administered twice weekly, was used to deliver ozone directly to the bladder to help manage her bladder cancer and prevent recurrence.

**Bladder Wash** was conducted weekly with ozonated water to ensure cleanliness and reduce microbial load in the bladder.

The mechanism of action for ozone therapy involves ozone gas (O<sub>3</sub>) which modulates the immune system by stimulating the production of cytokines and enhancing the oxidative stress response, which helps in the destruction of pathogens and cancer cells. <sup>[5][7]</sup> The effects of ozone on macrophages, T cells, B cells, NK cells, and dendritic cells can be used in the treatment of infectious diseases, autoimmune disorders, and cancer immunotherapy. <sup>[8]</sup>

### Supplements:

**Boswellia and Curcumin** for their anti-inflammatory properties, which helped reduce joint pain and inflammation.

**Probiotics** to support gut health and immune function, essential in managing inflammation and overall health.

**Vitamin D3 (Espectro D3 and LipoD3)** to address the patient's significantly low vitamin D levels, crucial for bone health and immune function.

**Treatment Outcomes:**

Following three months of treatment, the patient reported significant improvements: fatigue had improved, there was no nocturnal frequency of micturition, and the pain in both knee joints had reduced.

**Clinical Laboratory Test Results:**

The following table presents the laboratory test results before and after the treatment:

Test Parameter	Pre-Therapy	Post-Therapy	Significance
Ferritin	68.1 ng/mL	89.13 ng/mL	Indicates improvement in iron storage and overall health.
CRP	3.22 mg/L	1.80 mg/L	Reduction signifies decreased inflammation.
IgG	1410 mg/dL	1230 mg/dL	Decrease shows improved immune regulation.
IgE	938 IU/mL	266 IU/mL	Significant drop indicates reduced allergic response.
LDH	229 U/L	224 U/L	Slight decrease reflects stable cell turnover and integrity.
25 OH Cholecalciferol	4.0 ng/mL	56.8 ng/mL	Significant increase showing improved vitamin D levels.

The patient, a 66-year-old female, experienced a significant improvement in her health following a comprehensive treatment regimen including medical ozone therapy and various supplements. With reduced symptoms, normalized lab results, and enhanced well-being, she feels optimistic about her recovery journey and is committed to continuing her treatment under medical guidance for sustained improvement and better quality of life.

**Discussion**

This case illustrates the potential of integrative therapies, particularly high-dose Vitamin C and medical ozone therapy, in alleviating symptoms and improving the quality of life for patients with chronic conditions like fatigue, knee pain, and non-invasive bladder cancer. While showing promising results, the limitations, including the need for ongoing treatments and the necessity for more extensive clinical validation, underscore the importance of further research in this area. Nonetheless, these therapies offer a valuable adjunctive approach in managing complex medical conditions.

**Conclusion**

In conclusion, this case highlights the effectiveness of integrative therapies, including high-dose Vitamin C and medical ozone therapy, in significantly improving symptoms associated with chronic conditions such as fatigue, knee pain, and non-invasive bladder cancer. The observed enhancements in the patient's well-being underscore the potential of these treatments as valuable components of comprehensive healthcare approaches.

**List of Abbreviation:**

- CRP: C-Reactive Protein
- IgG: Immunoglobulin G
- IgE: Immunoglobulin E

LDH: Lactate Dehydrogenase

25 OH Cholecalciferol: 25-Hydroxycholecalciferol (also known as 25-Hydroxyvitamin D)

### Declaration:

All activities performed on the subject in this case report were conducted in accordance with Good Clinical Practice (GCP) guidelines and under the supervision of a qualified physician. The therapeutic interventions, including Medical Ozone therapy, Myers' cocktail, vitamin C infusions, and the administration of natural supplements, were carried out with the informed consent of the patient and under the direct guidance of Dr. Arul Kandaswamy at Nulife wellness centre. The patient's treatment plan and subsequent follow-ups adhered strictly to ethical standards and clinical protocols to ensure patient safety and the validity of the observed outcomes.

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