Comprehensive Management of Metastatic Leiomyosarcoma: A Case Report Utilizing Medical Ozone Therapy and Multidimensional Treatment Approach

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Abstract:

Background: Leiomyosarcoma of the spermatic cord is a rare and aggressive malignancy originating from smooth muscle cells, often presenting with metastases. Despite conventional treatments, patients may experience debilitating symptoms and disease progression.

Case Presentation: A 47-year-old male with a history of left spermatic cord leiomyosarcoma, diagnosed in August 2022, presented with bilateral lung metastases and left moderate pleural effusion. Despite undergoing left inguinal orchidectomy and three cycles of chemotherapy in November 2023, the patient continued to experience persistent symptoms. These included a chronic cough lasting three months, exertional dyspnea, and disrupted sleep due to coughing episodes. Seeking additional relief, the patient opted for a comprehensive treatment regimen at our clinic, including medical ozone therapy, high-dose Vitamin C, detox IV, rectal detox, and a range of supplements. Despite the complexity of his 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: The case highlights the challenges in managing advanced leiomyosarcoma and the potential of adjunctive therapies like medical ozone therapy in alleviating symptoms and potentially affecting disease progression. Further research is warranted to explore the efficacy and safety of such integrative approaches in oncology.

Keywords: Leiomyosarcoma, spermatic cord, metastases, medical ozone therapy, adjunctive therapy

Introduction

The case presents a 47-year-old male patient diagnosed with left spermatic cord leiomyosarcoma, a rare and aggressive form of cancer originating from smooth muscle cells in the spermatic cord. Lung cancer is a leading cause of cancer death worldwide, causing 1.4 million deaths annually. Despite its rarity, leiomyosarcoma often presents with metastases, as evidenced by bilateral lung involvement and pleural effusion in this patient. Despite undergoing conventional treatments like surgery and chemotherapy, the patient continues to grapple with debilitating symptoms such as cough, exertional dyspnea, and disturbed sleep. In pursuit of comprehensive symptom relief and potential disease control, the patient has opted for a multidimensional treatment approach incorporating medical ozone therapy, high-dose Vitamin C, detox IV, and various supplements. This holistic regimen aims not only to alleviate symptoms but also to bolster immune function and potentially enhance the body's ability to combat cancer. The case underscores the complexity of managing advanced cancer and highlights the role of adjunctive therapies like ozone therapy in addressing both symptoms and underlying disease progression.
Case Presentation

Patient Profile:

A 47-year-old male, presented to the Nulife wellness centre, with a history of persistent cough for three months, exertional dyspnea, and sleep disturbances due to cough. On auscultation, diminished breath sounds were noted in the left lung field. His vital signs at admission were a blood pressure of 110/70 mmHg, a pulse rate of 110 beats per minute, oxygen saturation (SpO₂) of 98%, and a weight of 65.8 kg.

In August 2022, patient was diagnosed with left spermatic cord leiomyosarcoma, for which he underwent a left inguinal orchidectomy. Subsequently, he developed bilateral lung metastases and moderate left pleural effusion. He received three cycles of chemotherapy in November 2023 and tried flower remedies for two months. There are no other significant diseases or contraindications reported.

The patient is currently undergoing multiple therapies including medical ozone therapies (saline ozone, MAHT, MIAHT, rectal insufflation), high-dose Vitamin C, detox IV, rectal detox, and nebulization with NaHCO₃ and H₂O₂. He is also taking supplements such as liposomal C, lipo curcumin, lipo trans resveratrol, lipo quercetin, lactoferrin drops, T. Orokinase, and Vitamin D3 10,000 IU. The treatment was initially administered on alternate days for one month, followed by weekly sessions.

Treatments:

Medical Ozone Therapy:

Medical ozone therapy involves the administration of ozone (O₃) to improve the oxygen supply to tissues and enhance the body's immune response. Ozone is a molecule consisting of three oxygen atoms, known for its strong oxidizing properties. 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.

[4]

Mechanism of Action (MOA):

1. Immunomodulation: Ozone therapy 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. [2][3]

2. Oxygenation: Ozone therapy is used to increase the amount of oxygen in the blood. It is achieved by ozonating the patient’s own blood outside the body and injecting it back into the body within a relatively short amount of time [5]

Administration Methods:

1. Saline Ozone: Ozone is dissolved in saline and administered intravenously.


3. Minor Autohemothery (MIAHT): A smaller volume of blood is treated with ozone and reinjected intramuscularly.

4. Rectal Insufflation: Ozone gas is administered rectally to facilitate absorption through the intestinal wall, thereby promoting hepatic flushing initially on alternate days for a duration of one month, followed by a weekly regimen.

Other Treatment:

High Dose Vitamin C: Vitamin C is administered in high doses (70 grams in this case) intravenously. It acts as an antioxidant and supports the immune system. High-dose Vit-C can destroy cancer cells by utilizing two different pathways that work in tandem. Initially, by producing hydroxyl radical (OH•) through the Fenton reaction, extracellular H₂O₂ may effectively kill cancer cells.[7]
Detox IV: These therapies aim to enhance the body's detoxification processes. Detox IV includes Chelation Sodium EDTA and Magnesium chloride, administered monthly once thereby improving hepatic function and fostering comprehensive detoxification

Nebulization with NaHCO₃ and H₂O₂: Provides local antimicrobial effects and helps in respiratory conditions by reducing infection and inflammation in the respiratory tract thus helping to clear infections and improve oxygenation.⁸


Clinical Laboratory Test Results

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

<table>
<thead>
<tr>
<th>Test Parameter</th>
<th>Pre-Therapy</th>
<th>Post-Therapy</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRP (mg/L)</td>
<td>64.9</td>
<td>1.3</td>
<td>CRP indicates inflammation; significant reduction shows improved condition.</td>
</tr>
<tr>
<td>Ferritin (ng/mL)</td>
<td>765.4</td>
<td>219.3</td>
<td>High ferritin levels can indicate inflammation or malignancy; reduction is a positive sign.</td>
</tr>
<tr>
<td>Hemoglobin (g/dL)</td>
<td>9.9</td>
<td>11.9</td>
<td>Hemoglobin indicates anemia; improvement suggests better oxygen-carrying capacity.</td>
</tr>
<tr>
<td>RBC (million/μL)</td>
<td>3.78</td>
<td>4.10</td>
<td>RBC count improvement indicates better overall hematological health.</td>
</tr>
<tr>
<td>PCV (%)</td>
<td>29.4</td>
<td>33.6</td>
<td>PCV (Packed Cell Volume) increase suggests improved blood volume and oxygenation.</td>
</tr>
<tr>
<td>Total WBC Count (cells/μL)</td>
<td>11440</td>
<td>5880</td>
<td>Total leukocyte count; decrease indicates reduced infection or inflammation.</td>
</tr>
<tr>
<td>Platelets (cells/μL)</td>
<td>621000</td>
<td>280000</td>
<td>Platelet count normalization indicates improved hematologic status.</td>
</tr>
<tr>
<td>ESR (mm/hr)</td>
<td>100</td>
<td>20</td>
<td>ESR indicates inflammation; significant reduction shows improvement.</td>
</tr>
<tr>
<td>D-Dimer (ng/mL)</td>
<td>5326</td>
<td>359</td>
<td>D-Dimer reflects clotting activity; significant decrease indicates reduced risk of thrombosis.</td>
</tr>
<tr>
<td>GGT (U/L)</td>
<td>55</td>
<td>17.1</td>
<td>GGT indicates liver function; reduction suggests improved hepatic health.</td>
</tr>
</tbody>
</table>

The patient, a 47-year-old male, experienced a significant improvement in his health following a comprehensive treatment regimen including medical ozone therapy and various supplements. With reduced symptoms, normalized lab results, and enhanced well-being, he feels optimistic about his recovery journey and is committed to continuing his treatment under medical guidance for sustained improvement and better quality of life.
Discussion
The comprehensive treatment approach incorporating medical ozone therapy alongside supplements and chemotherapy appears promising in managing the patient's complex condition of leiomyosarcoma with lung metastases. The observed improvements in inflammatory markers, blood counts, and overall well-being suggest the potential efficacy of ozone therapy as an adjunctive treatment in cancer care. Further research is warranted to elucidate the precise mechanisms underlying ozone therapy's therapeutic effects and its role in enhancing the body's immune response against cancer. Clinical trials exploring the safety and efficacy of ozone therapy in conjunction with conventional cancer treatments could provide valuable insights into its broader clinical utility.

Conclusion
In conclusion, the presented case highlights the potential benefits of integrating medical ozone therapy into the management of complex oncological conditions. The significant improvements in inflammatory markers, blood counts, and symptomatology suggest a favorable response to the comprehensive treatment regimen. However, further research and clinical trials are necessary to validate the efficacy and safety of ozone therapy as an adjunctive therapy in cancer care. Collaborative efforts between oncologists and practitioners of ozone therapy can enhance our understanding and utilization of this modality in optimizing patient outcomes and quality of life.

List of Abbreviation:
- CRP (mg/L): C-Reactive Protein
- RBC (million/μL): Red Blood Cell Count
- PCV (%): Packed Cell Volume (Hematocrit)
- Total WBC Count (cells/μL): Total White Blood Cell Count
- ESR (mm/hr): Erythrocyte Sedimentation Rate
- GGT (U/L): Gamma-Glutamyl Transferase

Discussion
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, 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.

References