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CASE REPORT

Combination Therapy of Major Autohemotherapy and Ozonated Bagging in a Case Diagnosed with Buerger's Disease (Thromboangiitis Obliterans)

Safa Unal^{1*} D, Abdulkadir Kaya¹ D, Alper Aziz Hudai Ayasli² D, Bekir Tunca³ D

¹Duzce University, Medicine Faculty, Department of Family, Duzce, Türkiye

²Duzce Atatürk State Hospital, Department of Neurology, Duzce, Türkiye

³Duzce University, Medicine Faculty, Department of Infectious Diseases and Clinical Microbiology, Duzce, Türkiye

* Corresponding Author: Abdulkadir Kaya, e-mail: dra.kadir@hotmail.com

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Abstract

It is well known that ozone therapy provides positive results as a complementary method in peripheral obstructive arterial diseases alongside medical treatment. This article presents a case diagnosed with Buerger's disease, where rapid improvement was observed after a combination of major autohemotherapy (AHT) and ozonated bagging.

Keywords: Buerger's Disease, Thromboangiitis Obliterans, Ozone Therapy, Ozonated Bagging

INTRODUCTION

Buerger's disease (thromboangiitis obliterans) is a chronic and occlusive vasculitis that affects small to medium-sized vessels, mainly in the extremities, causing partial inflammatory involvement without atherosclerosis. The most significant factor contributing to its development is tobacco use.¹

Atherosclerosis, or even a small occlusion in the lower extremity arteries due to conditions like diabetes mellitus or Buerger's disease, significantly reduces blood flow to peripheral tissues. Ischemia and minor traumas in the tissue create challenging ulcerations since the necessary oxygen, growth factors, and nutrients for repair are lacking, making major autohemotherapy an appropriate treatment option.²

Ozonated bagging is an effective treatment method for managing infections, ulcerations, and local skin lesions in the extremities. The procedure involves covering the treated area with a bag, evacuating the air inside, delivering ozone gas for a specific duration, and then removing the ozone gas through vacuuming3. Properly combining major AHT and ozonated bagging has been shown to prevent a significant portion of foot amputations caused by peripheral obstructions, especially in cases of diabetic foot.²

This article presents a case diagnosed with Buerger's

disease who underwent a combination therapy of major AHT and ozonated bagging.

CASE

The patient was a 46-year-old male with no known systemic diseases, smoking approximately² packs of cigarettes per day for 30 years and having a history of social alcohol use. In 2008, he sought medical attention for an ingrown toenail in his left big toe at an orthopedic clinic. After examination and tests, he was diagnosed with Buerger's disease, and a plastic surgeon partially amputated the left big toe. Despite continued smoking, the patient developed ischemic changes in his right toe starting in 2018, leading to the amputation of the right foot's first, second, and third toes by a cardiovascular surgeon at another center. Due to wound infection, the patient was referred to our infectious diseases service and, upon discharge, directed to our center for Major AHT and ozonated bagging treatments (Figure 1). The patient was provided with smoking cessation counseling and advised on lifestyle changes. However, he currently reports smoking 3-4 cigarettes per day. Nevertheless, three weeks after starting sessions of ozone therapy, along with Major AHT, the infected-looking wound on the right foot appeared cleaner and healthier, with reduced discharge and necrotic appearance (Figure 2).



Figure 1. Appearance at the beginning of ozone therapy

DISCUSSION and CONCLUSION

This article presents a case of Buerger's Disease with a history of toe amputations and an active necrotic foot ulcer that showed visible improvement with the combination therapy of Major AHT and ozonated bagging. Existing literature indicates positive results when ozone therapy is used as a complementary method alongside medical treatment for peripheral obstructive arterial diseases.^{2,4} However, most studies of studies in the literature focus on patients with diabetic foot ulcers, and there is a lack of



Figure 2. Appearance after three weeks of 5 sessions of ozone eans Major AHT and ozone bagging treatment

sufficient research regarding Buerger's disease. Therefore, further extensive studies in this context are necessary.

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