

Lesiones Deportivas. Reemplazo Articular. Artroscopia.

# Ozone Therapy

# What is Ozone Therapy?

Ozone therapy is a medical treatment that uses ozone (O3), a gas made up of three oxygen atoms. While high concentrations can be toxic if inhaled, when used for medical purposes and in controlled doses, it has proven therapeutic benefits.

Medical ozone is obtained from pure oxygen and is never inhaled. Instead, it is applied through other routes under professional supervision.

### What is Ozone Therapy Used for?

Ozone therapy has been used for over 100 years. During World War I, it was used to treat infected wounds, and it was discovered to help reduce inflammation, regulate the immune system, improve circulation, and fight bacteria.

Today, it is used as a complementary therapy with great success in various diseases, including:

From an orthopedic point of view: Joint and muscle problems:

Osteoarthritis (joint wear)

Herniated discs

Pressure ulcers

Tendon or ligament injuries or inflammation

Osteomyelitis (bone infections)

It also has applications in gynecological, dental, internal medicine, skin conditions, allergies, among others.

Consulta previa cita: Tel. Directo: (322) 293 7993



Lesiones Deportivas. Reemplazo Articular. Artroscopia.

## How Does Ozone Work in the Body?

# Ozone has several positive effects on the body:

Improves tissue oxygenation

It increases the release of oxygen in the body and stimulates energy production (ATP).

Reduces inflammation and improves circulation

It stimulates the production of prostacyclin, a substance that dilates blood vessels and improves blood flow, reducing inflammation.

Destroys bacteria, viruses, and fungi

It breaks the membranes of these organisms, preventing their reproduction. It is more powerful than chlorine and is a natural process performed by the body's defense cells (macrophages).

Activates the immune system

It stimulates the production of defensive substances such as interferons and cytokines, helping fight infections and inflammation.

#### **Current Clinical Studies**

#### Knee Osteoarthritis:

Studies are being conducted to evaluate ozone's effectiveness in controlling pain in patients with joint wear.

Herniated Discs:

Ozone is also being widely used and studied as an alternative to surgery in some cases of disc herniation.

Contraindications (When Ozone Therapy Should Not Be Used)

### Ozone therapy is not recommended in the following cases:

Severe bleeding or coagulation disorders

Thrombocytopenia (low platelet count)

Allergy or intolerance to ozone

Recent cerebral hemorrhages or strokes

Av. Los Tules #136 int. 220 Col. Gustavo Díaz Ordaz, Puerto Vallarta, Jalisco México CP 48310

Consulta previa cita: Tel. Directo: (322) 293 7993