

SUMMARY

Luhačovice Spa is a Czech Spa Resort known worldwide with a nearly 200-year tradition and 12 springs of powerful mineral water.

In this clinic, in 2016 more than 800 Guna MDs injections were applied with approximately 90% superior effects.

The spectrum of application is: knee 51%, back pain 15%, shoulder 10%, carpal 10%, elbow, hip, Achilles tendinitis, heel, small joints and Piriformis Syndrome.

The technique used for Piriformis Syndrome injections includes:

- MD-Muscle or MD-Matrix
- Needle 20G, 0.9x70-90 mm
- Gentle manipulation of the needle identification of the sacrum
- Aspiration haematoma of m. piriformis
- Risk: N. ischiadicus damage, bleeding.

This deep application of Guna MDs in patients with Piriformis Syndrome is safe and effective. Further clinical studies are needed to confirm our results.

KEY WORDS

LUHAČOVICE SPA,
GUNA COLLAGEN MD-MUSCLE, GUNA
COLLAGEN MD-MATRIX, TRIGGER
POINTS, PIRIFORMIS SYNDROME

3 YEARS IN LUHAČOVICE SPA WITH COLLAGEN MEDICAL DEVICES INJECTIONS IN THE TREATMENT OF PIRIFORMIS SYNDROME

INTRODUCTION

Luhačovice Spa is a Czech Spa Resort known worldwide with a nearly 200year tradition and 12 springs of powerful mineral water.

It has been originally established to heal patients with asthma and tracheo-bronchial disorders. In most recent times the Spa is being visited by an increasing number of oncologic patients or patients with musculoskeletal disorders.

– The working team of the Spa Policlinic consists of the head and second graduated anesthesiologists, specialized in internal and emergency medicine, a rehabilitation doctor, an ENT specialist and an orthopedist; the staff includes 4-5 nurses and 5 physiotherapists.

The most favorite approach to the patient is individual and holistic.

Some new diagnostic methods as Computer Kinesiology and Hotman System are used for the evaluation of the Spa treatment efficacy.

The spectrum of Luhačovice Spa patients suffer from asthma + COPD (1/3), onco-

logic pathologies (1/3), and myoskeletal disorders (1/3).

The typical profile of patients with myoskeletal disorders is:

- F, aged 55+ suffering from back pain and mobility disorder
- Obesity, hypertension, thyreopathies, osteoporosis, hyperlipoproteinemia
- Stp.CHCE, HYE
- Assuming more than 5 medicaments
- Consulting more than 3 doctors.

Guna MDs injections have been successfully used for 3 years.

In 2016 more than 800 Guna MDs injections were applied with approximately **90% superior effects**.

The spectrum of application concerns: knee 51%, back pain 15%, shoulder 10%, carpal 10%, elbow, hip, Achilles tendinitis, heel, small joints and Piriformis Syndrome.

We apply Guna MDs on the Trigger points (**TgP**), especially periosteal.

In order to evaluate the results we use the

WOMAC Questionnaire filled in before and after the application of Guna MDs.

PIRIFORMIS SYNDROME

In clinical practice **Piriformis Syndrome (PS) (FIGURE 1)** is usually latent in diagnoses such as low back pain, sciatica, FBSS, L5/S1 nerve root irritation, SI syndrome, etc.

– These diagnoses are often supported by X-ray, CT or MRI scan showing spondylosis and osteochondrosis of LS spine or herniated disk.

CLINICAL HISTORY AND DIAGNOSIS OF PIRIFORMIS SYNDROME

Patient suffering from unilateral back and gluteal pain radiating downwards to the lower limbs and paresthesia of the affected branches of the sciatic nerve: *n. pudendus* and *n. gluteus* are often affected.

In fact, pain and discomfort are caused by the Compartment syndrome with compression of the sciatic nerve by oedema, haematoma or *Myositis ossificans* of the piriformis muscle.

The cause of PS could be multiple: sedentary job, overloading or trauma of rotators of the hip during sports or other physical activities, etc. Some authors suggest that PS is responsible for male impotence and female dyspareunia.

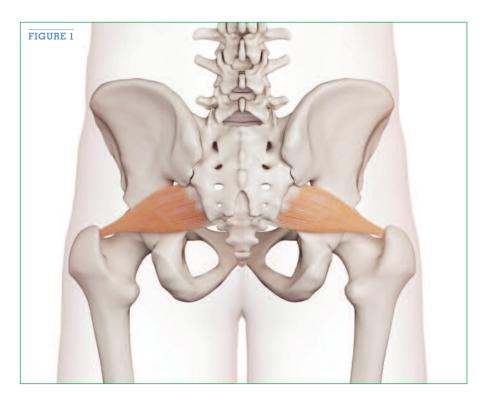
 PS diagnosis is based on the identification of painful gluteal muscle TPs practically in 100% of patients.

The Beatty test is positive in most cases and the Lasègue test is positive in more than 50% of patients.

It is important to note that, if neurologists state it is not herniated disk, and if orthopedists say it is not a hip, most likely the patient suffers from Piriformis Syndrome.

TREATMENTS OF PS

Non-invasive treatments include: Physiotherapy (exercises, yoga, stretching, mas-



sages, etc.); Electrotherapy (magnet, laser, ultrasound, etc.); Watertherapy, etc. Semi-invasive treatments include: Acupuncture, Injection techniques. Injection agents used to treat PS are:

- Lidocaine (Marcaine)
- Steroids
- Combination of both the above mentioned substances
- Botulotoxin, under CT control
- Guna Collagen MDs injections are given in Luhačovice (CZ) since 2013.

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RESULTS

A Group of **28 patients** (3 x surgery indicated) was administered **MD-Muscle** or **MD-Matrix**.

- 21 patients received "1-shot" therapy
- 7 patients received both 2 TgP treated
- 2 patients received more than 3 applications

- 2 x identified haematoma m. piriformis
- No one has worsened
- No one has undergone surgery.

Possible pitfalls and mistakes include the use of a needle not long enough, wrong handling, severe pain caused by nerve touch, and bleeding.

Patients suffering from haemophilia and taking anticoagulants should not be treated.

This deep application of Guna MDs in patients with Piriformis Syndrome is safe and effective.

Further clinical studies are needed to confirm our results.

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