## Possover International Medical Center



# ENDOMETRIOSIS of the PELVIC NERVES

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### INTRODUCTION

Deep infiltrating endometriosis is usually associated with a number of complex symptoms and can often present particular challenges when it comes to treatment options. It is well known that the urinary tract as well as the intestine can be affected by endometriosis. Less well-known are the other clinical forms of the disease, such as endometriosis of the pelvic nerves for example, usually the sciatic or femoral nerves. Similarly, there is a widespread lack of research in other pathologies of the pelvic nerves. Despite being one of the most commonly diagnosed gynecological problems, there are only a handful of clinical studies, which have concerned themselves with investigating incidents of endometriosis of the sciatic nerve. Since a patient experiencing sciatic pain would not normally present in the gynecologist's office, Prof. Possover began the process back in 2004, of sensitizing his medical colleagues working in the fields of orthopedics, neurosurgery and pain-management, to the problems associated with endometriosis of the sciatic nerve. As a matter of fact, in each and every patient who presents with sciatic pain of "unknown origin", the possibility of endometriosis should be considered as a potential cause, particularly when the pain experienced worsens during the menstrual cycle.

An isolated endometriosis of the sciatic nerve is practically impossible to diagnose through MRI, CT or vaginal ultrasound examinations or indeed even via a laparoscopic exploration of the pelvis. In such cases, what is required is a thorough, laparoscopic exploration of the sciatic nerve itself and complete removal of the lesion where discovered, in order to relieve pressure on the nerve.

Having treated more than 200 patients with endometriosis of the sciatic nerve and documented their cases in 2011, Prof. Possover established that this condition was far more common than had previously been assumed by medical experts. Endometriosis can similarly affect all the various nerves of the pelvis, such as the obturator nerve or the femoral nerve.

The fact that these conditions of the pelvic nerves are extremely difficult to diagnose means that they are very often overlooked. Moreover, a very profound level of anatomical expertise of the complex nature of the pelvic nerves is required, since the laparoscopic treatment of endometriosis of the sciatic nerve is altogether one of the most demanding procedures in the field of pelvic surgery.

The principal reason though, almost definitely has to do with a distinct lack of knowledge regarding this diagnosis. So it was shown, that the patients in Prof. Passover's case studies from 2011, had each undergone on average of four prior surgeries and had waited many years to the point of the correct diagnosis.

A further dilemma concerning the treatment for endometriosis of the sciatic nerve has to do with the fact that the diagnosis and treatment of this complex disorder falls right in between several areas of medical expertise that normally do not overlap: endometriosis is typically a gynecological problem, the pelvic nerves are more or less ignored by most medical disciplines as a general rule, diagnosis of conditions of the nervous system falls to the neurologists, the treatment thereof however, is in the hands of the neurosurgeons. The problem then arises as a result of the fact that the approach is laparoscopic: neurosurgeons are not trained in laparoscopic surgical techniques and moreover do not generally have sufficiently high levels of knowledge in pelvic anatomy.

### DIFFERENT FORMS OF ENDOMTRIOSIS OF THE SCIATIC NERVE

Essentially, there are two differing types of endometriosis of the sciatic nerve. The first comprises a deep infiltrating endometriosis of the sciatic nerve where the pelvic organs and pelvic wall are also affected. The other is where an isolated case of endometriosis presents in the sciatic nerve alone and the organs and pelvic wall remain unaffected by endometriosis.

#### Deep infiltrating endometriosis of the parametrie with implication of the sciatic nerve

Deep infiltrating endometriosis of the recto-vaginal fascia where the rectum may or may not be affected, the ligaments supporting the uterus (parametrium) can also involve the root of the sciatic nerve (sacral nerve) or indeed the nerve itself. The anatomical proximity of all these structures, means that the second, third and fourth sacral nerves may also routinely be affected. By contrast, the first and fifth lumbar nerves are almost never involved.

Due to these anatomical factors, the cause of the pain may be traced back to the sacral nerves in the genital area (vulvodynia, pain in the pubic area, pain in the coccyx), in the buttocks and thighs (sciatica). Since the sacral nerves are also involved in function of the bladder, bowel and sexual organs, it is often the case that these patients suffer from urinary urgency and frequency symptoms (emptying of the bladder more than 8 times per day as well as at frequently at night (nocturia), loss of libido and chronic constipation. Moreover, if the nerves become completely damaged, this can, in the end, lead to the patient's complete inability to urinate. This situation however, is extremely rare

#### Isolated endometriosis of the sciatic nerve

This particular form of endometriosis affects the sciatic nerve itself. The cause of this condition is yet unknown. This form of the disease is extremely destructive, since, like endometriosis of the bladder and bowel, it develops within the tissue, thereby destroying it in the process. An operation is recommended in this case, as quickly as possible and before the nerve is irreversibly damaged. Even a suspected case of isolated endometriosis of the sciatic nerve is enough for the clinical indication of a laparoscopic treatment of the nerve. Hormone treatment will have no effect whatsoever and can even be dangerous, as it could lead to delays in surgical intervention.

Such injuries can lead to loss of movement, particularly in the motor-function of the foot. Neuropathic pain can manifest mainly on the backside of the thigh but may also occur on the front side of the thigh. Depending on the extent of the damage to the sciatic nerve, further symptoms such as numbness, loss of sensitivity or indeed complete loss of feeling may also be experienced

### **Treatment**

The treatment of these forms of endometriosis should only be undertaken in clinical centers that have specialized in the demanding surgical techniques for the treatment of endometriosis. The surgeon must not only be familiar with the diagnostics of neuropelveology but also with its complex surgical techniques. The laparoscopic procedure is based on freeing and relieving the sciatic nerve in the damaged area and complete removal of the endometriosis lesions in order to avoid recurrence. The basic procedure performed by neurosurgeons via the intestine, does not offer sufficient access to the sciatic nerve and complete removal of the endometriosis therefore cannot be guaranteed, as the lesions develop within the pelvic area and not outside of it. The standard laparoscopic procedure of the small pelvis, without direct exploration of the sciatic nerve, similarly does not allow accurate diagnosis of this isolated form of the disease.

In cases of suspected endometriosis of the sciatic nerve, a laparoscopic procedure is nearly always indicated and should be performed as soon as possible in order to avoid permanent and irreversible damage to the sciatic nerve.

# FAQ`s

Blood Loss:	Less than 50 ml, continued risk of bleeding
Blood Transfusion:	Not required
Duration of Procedure:	2-4 hours
Postoperative intensive care:	Not required
Skin incisions:	Three 5mm long incisions in the abdomen
Duration of hospitalization:	3- 5 days
Normal activities resumed:	After approximately 3 weeks
Risk of paralysis:	No

# **Possover International Medical Center**



# Univ.-Prof. Prof. Dr. med. M. Possover

**International Center for Neuropelveology** 

Center for surgical Gynecology ("Center of Excellence")

**Certified Center for Endometriosis - Level 3** 

**Certified Center for Incontinence** 

### Kontakt



# RUFEN SIE FRAU NEUMANN AN FÜR EINE VERTRAULICHE BERATUNG

Wenn Sie eine Operation wünschen oder mehr Informationen über die Eingriffe benötigen, die das Possover International Medical Center anbietet, rufen Sie uns noch heute an.

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#### How to find us:

From the MAIN STATION take tram No. 4–direction "Tiefenbrunnen" and get off at the stop "Feldeggstrasse"

From BELLEVUE take tram No. 2 or 4 – direction "Tiefenbrunnen" to stop "Feldeggstrasse"

Walk towards the lake on Feldeggstrasse, take the first left onto "Bellerivestrasse," then take the first right into "Klausstrasse"

