

ENDOMETRIOSIS IN THE SCIATIC NERVE

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Abstract

Endometriosis is defined as the presence of endometriotic tissue outside the uterus, with a range of possible areas to be affected, generating a range of symptoms. In more singular cases, there is infiltration of the main nerves of the pelvis, such as the sciatic nerve. As an instrument used to obtain bibliographic data on the subject, the following databases were consulted: Scielo; Medline; PubMed; Virtual Health Library (VHL). Sciatic endometriosis puts pressure on the sciatic nerve, possibly causing pain, numbness, cramping, and a tingling sensation in the lower back, hips, buttocks, thighs, calves, knees, and feet. Patients often experience pain in the back of the leg and it radiates to the heel. Its location usually affects the lateral surface proximal to the greater sciatic foramen. It is necessary to carry out adequate and efficient intervention to avoid possible irreversible neurological injuries. It is understood, therefore, that endometriosis in the sciatic nerve is a rare condition with a complex diagnosis, which requires early diagnosis, effective and individualized treatment, including a multidisciplinary team, and choice of the best option for the patient in question, in attempt to prevent possible sequelae.

Keywords: Endometriosis, Sciatic nerve, Involvement, Pain Clinics, Low Back Pain.

INTRODUCTION

Endometriosis is a common gynecologic condition, first described by von Rokitansky in 1860. It is defined as the occurrence of endometriotic tissue (endometrial glands, stroma, or both) outside the uterus. The most affected areas are pelvic peritoneum, ovaries and rectovaginal septum. Almost 5-10% of women in their reproductive years develop endometriosis. However, among patients with pelvic pain and infertility, the prevalence can range from 35% to 50%. The most common presentation is pain, usually in the form of dysmenorrhea, pelvic pain, and dyspareunia, due to involvement of visceral nerves (FEBRASGO, 2021). Rarely, endometriosis has been described as infiltrating major pelvic nerves and causing sciatic neuropathy or lumbosacral plexopathy. Endometriosis involving the sciatic nerve is commonly a direct extension of deeply infiltrating rectovaginal disease through the lateral pelvic wall. Less commonly, endometriosis over the sciatic nerve may be present in isolation, without any apparent endometriosis in the pelvic peritoneal cavity (TEIXEIRA, 2011).

METHODOLOGY

The present study is a bibliographic review of an integrative nature and a qualitative approach of an analytical nature, relevant at national and international levels regarding the involvement of Endometriosis in the Sciatic Nerve. To achieve the objectives of this study, a search was carried out in the PubMed database in June 2022; Scielo; Virtual Health Library (VHL); and allied bases. In this perspective, to organize the

search formula, the terms that make up the body of work were chosen, through the Health Descriptors (DeSC), to search for scientific articles, namely: “endometriosis”, “sciatic nerve” and “involvement”. Therefore, selection limitations were defined in order to compile and delimit only articles that address the scope of Endometriosis in the sciatic nerve. As inclusion criteria, there was the choice of literary works in Portuguese and English and were considered cohort studies, cross-sectional studies, case studies, and integrative reviews.

RESULTS AND DISCUSSION

The sciatic nerve is the largest somatic nerve in the body. This condition can be very difficult to diagnose as it can present a lot like a typical case of sciatica, which usually occurs due to disc prolapse compressing the adjacent nerve root as it exits the spine. The accurate diagnosis of this condition is essential for the correct planning of surgical treatment. Due to diagnostic difficulty, a multidisciplinary team approach including neurosurgical and orthopedic involvement is required (POSSOVER, 2006). Sciatic endometriosis puts pressure on the sciatic nerve. Therefore, it can cause pain, numbness, cramping, and a tingling sensation in the lower back, hips, buttocks, thighs, calves, knees, and feet. Patients often experience pain in the back of the leg and it radiates to the heel (POSSOVER, 2005). Although there are reports of the use of ultrasound for the evaluation of endometriosis affecting the extrapelvic segment of the sciatic nerve, MRI remains the imaging modality of choice for sciatic endometriosis. Endometriosis over the endopelvic portion of the sciatic nerve, which is formed by the fusion of the lumbosacral trunk (comprised of the L5 and S1 and S2 nerve roots), can cause irritation in all three dermatomes. This results in a wider distribution of the affected area as opposed to symptoms

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limited to a single dermatome from compression of a single nerve root by a specific bulging disc (TEIXEIRA, 2011). The recent publication of the largest series of sciatic endometriosis by Possover identified that the most common location of endometriotic involvement of the sciatic nerve is on the lateral aspect proximal to the greater sciatic foramen. Pain caused by isolated endometriosis of the sciatic nerve is also often related to the menstrual cycle. It is usually present only during menstruation initially and then becomes more constant over time with significant menstrual exacerbation (POSSOVER, 2006). The response to hormonal treatment for endometriosis would provide additional support for this unusual diagnosis. When referring to physical examination, clinical pelvic gynecological examination in patients with isolated endometriosis is usually unremarkable. Neurological findings may be present depending on the extent of neurological damage. Limitation of the straight leg raise test is common with altered sensation along the L5 and S1 dermatomes with possible reduced ankle power and changes in ankle reflex (POSSOVER, 2019). Although there are limited reports of successful medical treatment for sciatic nerve endometriosis, there are numerous publications of cases requiring surgical intervention due to non-response to medical treatment. The condition can progress and timely intervention has been recommended to prevent significant neurological damage (POSSOVER, 2019).

Conclusion

When the endometrium is present outside the uterine cavity and around the nerves, a series of damages can occur, characterizing neuropathy as one of them. Therefore, when the affected nerve is the sciatic nerve, the condition is called sciatic endometriosis - less recurrent in clinical experience, when compared to other sites more commonly affected by the pathology.

Endometriosis in the sciatic nerve is, therefore, a disease with a complex diagnosis. Thus, the patient usually refers, above all, to pain in the back of the leg, radiating to the heel, and, in addition, symptoms of regular endometriosis are also reported (POSSOVER, 2006). Therefore, an early diagnosis, effective and individualized treatment, including a multidisciplinary team, and choosing the best option for the patient in question, in an attempt to prevent possible neurological injuries, are necessary and essential (DUCCINI, 2019).

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