

# Pregnancy-related lumbosacral pain

## *Dor lombossacral relacionada à gestação*

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### ABSTRACT

**BACKGROUND AND OBJECTIVES:** Pregnancy causes physiological and anatomical changes in the woman's body, affecting several systems such as the musculoskeletal. During pregnancy or in the postpartum period, these changes may cause low back pain or low pelvic pain, preventing the normal movement of these structures and causing suffering. The objective of this study was to discuss the diagnosis and treatment of pregnancy-related lumbosacral pain, focusing on terminology, epidemiology, risk factors, pathophysiology, prognosis, diagnosis, and treatment.

**CONTENTS:** We searched the literature in Pubmed, Cochrane Library, Ovid and Google using the terms "low back pain", "pelvic girdle pain", "lumbopelvic pain", "posterior pelvic pain", "pregnancy-related low back pain", "pregnancy-related pelvic girdle pain" and "pregnancy-related lumbopelvic pain", for articles in English, Portuguese and Spanish in the last 20 years or older, where relevant.

**CONCLUSION:** Pregnancy is one of the main causes of lumbosacral pain, and one of the most frequent diseases during gestation. The correct management of this pathology reduces negative impacts on the life of pregnant women.

**Keywords:** Low back pain, Pelvic pain, Pregnancy.

### RESUMO

**JUSTIFICATIVA E OBJETIVOS:** A gestação causa alterações fisiológicas e anatômicas no corpo da mulher, podendo afetar diversos sistemas como o musculoesquelético. Durante a gestação ou no período pós-parto, essas alterações podem causar dor lombar ou dor pélvica baixa, impedindo a movimentação normal dessas estruturas e causando sofrimento. O objetivo deste estudo foi discutir o diagnóstico e o tratamento da dor lombossacral relacionada à gestação, com foco na terminologia, epidemiologia, fatores de risco, fisiopatologia, prognóstico, diagnóstico e tratamento.

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**CONTEÚDO:** Foi realizada busca na literatura no Pubmed, *Cochrane Library*, Ovid e Google, utilizando-se os termos "low back pain", "pelvic girdle pain", "lumbopelvic pain", "posterior pelvic pain", "pregnancy-related low back pain", "pregnancy-related pelvic girdle pain" e "pregnancy-related lumbopelvic pain", por artigos em inglês, português e espanhol nos últimos 20 anos, ou mais antigos, quando relevantes.

**CONCLUSÃO:** A gestação é uma das principais causas de dor lombossacral e esta é uma das doenças mais frequentes durante a gestação. O correto manuseio desta doença reduz os impactos negativos na vida da gestante.

**Descritores:** Dor pélvica, Gestação, Lombalgia.

### INTRODUCTION

Pregnancy causes physiological and anatomical changes in the woman's body and can affect several systems (such as cardiovascular, respiratory, endocrine, renal, among others), as well as the musculoskeletal system. These changes are necessary to meet the increased metabolic demand of the mother during pregnancy, the fetal needs and allow the pregnant woman and the fetus to prepare for the birth<sup>1</sup>. On the other hand, in many women, during pregnancy or in the postpartum period, changes in the musculoskeletal system will cause lower back or pelvic pain, preventing the normal movement of these structures and causing suffering. Pregnancy is one of the main causes of lumbosacral pain, being one of the most frequent diseases during pregnancy and it has gained importance in recent years due to the impact it has on the pregnant woman's life and the costs involved<sup>2</sup>.

Absenteeism is directly related to the intensity of pain and the degree of disability. Absenteeism doubles in pregnant women with pelvic pain (PP) or low back pain (LBP) when compared with other women<sup>3</sup>. Pregnant women with LBP and PP face difficulties in daily activities, such as getting up, sitting for prolonged periods, walking longer distances, dressing, carrying weights and even sexual difficulties. In more severe cases, crutches or wheelchairs may be required<sup>4,5</sup>.

The objective of this study was to discuss the diagnosis and treatment of pregnancy-related lumbosacral pain (PRLSP), focusing on terminology, epidemiology, risk factors, pathophysiology, prognosis, diagnosis, and treatment.

### CONTENTS

Pubmed, Cochrane Library, Ovid and Google were searched, using the terms "low back pain", "pelvic girdle pain", "lumbopelvic pain", "posterior pelvic pain", "pregnancy-related low back pain", "pregnancy-related pelvic girdle pain" and "preg-

nancy-related lumbopelvic pain”, for articles in English, Portuguese and Spanish in the last 20 years or more, when relevant. The most relevant articles on the topic were selected and included in the study.

## PATHOPHYSIOLOGY

The PRLSP etiology is not well-defined. Weight gain during pregnancy, associated with changes in posture required to accommodate the increased abdominal and breast volume lead to a change in the load pattern on the joints and other musculoskeletal structures, leading to pain<sup>6</sup>. From the biomechanical point of view, the increase of the uterine volume leads to stretching and weakening of the abdominal muscles, generating an increase of tension on the lumbar muscles. Also, the increased volume of the breast and the abdomen shifts the center of gravity forwards, causing changes in the posture with pelvic anteversion and increased lumbar lordosis, leading to increased load on the lumbar spine and sacroiliac ligaments. The increased axial load compresses the intervertebral discs, expelling the fluids from the disc and decreasing their height, which may contribute to LBP<sup>7</sup>. From the endocrine point of view, there is a ligament laxity related to the increased levels of progesterone, estrogen, and relaxin, making the hip and spine joints less stable<sup>8</sup>. From the vascular point of view, the compression of the large abdominal vessels by the gravid uterus causes venous stasis and hypoxemia, compromising the metabolic activity of the nerve structures, causing pain<sup>9</sup>.

## TERMINOLOGY

Many papers use different terminologies, making it uncertain that the terms refer to the same condition. Madeira et al.<sup>10</sup> used the terms pelvic pain, posterior low back pain, and combined pain. Wu et al.<sup>11</sup> introduced the term “pregnancy-related”, taking into account that the symptoms may begin after birth and proposed the use of the terms “pregnancy-related pelvic girdle pain”, “pregnancy-related low back pain” and “pregnancy-related lumbopelvic pain”. This study adopted the terms proposed by Wu et al.<sup>11</sup>.

## EPIDEMIOLOGY

The incidence of PRLSP varies greatly, affecting between 24 and 90% of pregnant women. There is a large variation in the incidence due to the lack of a universally accepted classification system<sup>12</sup>. In some studies, this prevalence may reach 95.23% of pregnant women<sup>13</sup>. According to Cochrane review, more than two-thirds of the pregnant women have LBP, and approximately one-fifth have PP<sup>12</sup>. It usually starts around the 18<sup>th</sup> gestational week, with a peak between the 24<sup>th</sup> and 36<sup>th</sup> weeks<sup>11</sup>. Between the 12<sup>th</sup> and the 18<sup>th</sup> gestational weeks, the prevalence of PRLSP is around 62%, and 33% of the pregnant women had PP, 11% had LBP, and 18% had both. At the end of gestation, around the 35<sup>th</sup> week, the incidence of LBP may reach 71.3% and PP 64.7%<sup>14</sup>.

## RISK FACTORS

Among the predictive factors of lumbosacral pain, we can mention strenuous work during pregnancy and history of PRLSP<sup>11</sup>. The incidence of LBP is higher in pregnant women with advanced maternal age, history of LBP in previous pregnancies, elevated body mass index (BMI), joint hypermobility, pain worsening when lying down for prolonged periods and higher levels of anxiety<sup>14,15</sup>. The history of LBP in previous pregnancies is a strong predictor for recurrence in subsequent pregnancies, with a probability around 85%<sup>16</sup>. In relation to PP, strenuous work, history of low back pain, or trauma on the pelvic bones, advanced pregnancy stages, higher BMI and higher depression scores are important predictors<sup>14,17</sup>.

There is a relationship between pain intensity, catastrophizing levels of pain, depression, and anxiety. Anxiety during pregnancy is related to complications including abortion, pre-eclampsia, prematurity, and low birth weight. Depression and anxiety are important predictors of postpartum depression<sup>18</sup>. Pregnant women with PRLSP have a three times greater chance of presenting symptoms of postpartum depression than pregnant women without pain<sup>19</sup>.

## CLINICAL PRESENTATIONS

PRLSP may manifest as PP, LBP, or with the association of the two. Both are more intense with the advance of pregnancy and, in some cases, pain may radiate to the gluteal region, thigh, leg, and foot<sup>11,12</sup>. It is essential to differentiate between LBP and PP since they have different etiologies and require specific treatment strategies<sup>20</sup>.

Pregnancy-related pelvic pain (PRPP) is located between the posterior iliac crest and the gluteal fold, particularly close to the sacroiliac joints, and can radiate to the posterior aspect of the thigh. Pain in the pubic symphysis may occur in association or alone, with possible irradiation to the anterior aspect of the thigh<sup>21</sup>. The pain is intermittent and may be precipitated by prolonged postures, usually occurring during daily tasks such as walking, sitting or standing<sup>20</sup>. The first manifestation of pain occurs during pregnancy, with painful palpation of the gluteal musculature and the topography of the sacroiliac joints, and positive PP provocation tests<sup>22</sup>.

The posterior PP is defined as low without the component of the pubic symphysis. It is characterized by a stinging pain in the gluteal region, distal and lateral to the L5 to S1 area, and may or may not radiate to the posterior aspect of the thigh and knee. It is intermittent, usually associated with weight lifting, the range of movement of the spine and hips within the normal range, in addition to positive posterior PP provocation test<sup>23</sup>.

The pregnancy-related low back pain (PRLBP) occurs between the upper region of the spinal process of the last thoracic vertebra, inferiorly by the sacrum and laterally by the lateral borders of the erector muscle of the spine and can irradiate to the leg<sup>21</sup>. The pain is usually exacerbated by anterior flexion, causes movement restriction in the lumbar region, and is exacerbated by the palpation of the erector spinae muscles<sup>20</sup>. The first manifestation

may occur before pregnancy. The lumbar range of motion decreases, usually there is no relation to ambulation or to perform daily tasks such as sitting or standing, and the PP provocation tests are negative<sup>22</sup>. While PRPP is more intense and disabling during pregnancy, PRLBP appears to be more intense and more common after birth<sup>24</sup>.

## DIAGNOSIS

In pregnant women with PRLSP, a good patient's history and physical examination are necessary to exclude other causes of pain, to differentiate between LBP and low PP, the level of disability and propose an individualized treatment. The warning signs may be a history of traumas, weight loss, cancer, use of steroids and other states of immunosuppression, neurological symptoms, fever, among others. These red flags may indicate the presence of hidden causes such as inflammatory, infectious, traumatic, neoplastic, degenerative or metabolic causes<sup>25</sup>.

The diagnosis of PRLSP is based on the symptoms, as there are few available tests. However, it is important to differentiate between PRLBP and PRPP, since the management and prognosis of the two conditions are different. The location of the pain, its characteristics, and intensity, triggering factors and provocation tests are useful<sup>20</sup>.

In relation to PRPP, in addition to the clinical presentation described, the European Guidelines recommend performing a functional test (straight leg elevation), four tests for the sacroiliac (posterior provocation of PP, Patrick-Fabere, Gaenslen and palpation of the long dorsal sacroiliac ligament) and two tests for pubic symphysis (palpation of the pubic symphysis and modified Trendelenburg pelvic girdle test)<sup>21</sup>. The diagnosis of PRPP is considered positive with a positive functional test plus one of the tests for sacroiliac, or one of the positive pubic symphysis tests<sup>26</sup>. PRPP can be categorized into five subgroups: 1) Pelvic girdle syndrome, when the pain is present in the three pelvic joints; 2) bilateral sacroiliac syndrome, when the pain is referred in both sacroiliac joints; 3) Unilateral sacroiliac syndrome, with pain present in one sacroiliac joint; 4) Simphysiolysis, when only the pubic symphysis presents pain; and 5) Miscellanea group, when there is pain in one or more pelvic joints, but with inconsistent conclusions. This classification is important because the number of joints involved seems to interfere in both pain intensity and function<sup>27</sup>.

Several questionnaires have been applied in pregnant women with PRLSP in order to evaluate the functionality and direct the most appropriate treatment for each case. The resulting disability from the pain is generally measured using the Quebec Back Pain Disability Scale. Although this scale has been developed to assess the degree of disability in patients with not-pregnancy related low back pain, it has been adapted for this use<sup>16</sup>. Other evaluation methods are also used to evaluate the degree of disability and functionality of pregnant women (Roland-Morris, Oswestry, Disability Rating Index (DRI) and others), without being developed for this purpose. For example, the DRI used by Olsson and Nilsson-Wikmar<sup>28</sup>, which evaluates, in one of its 12 items, the ability of the pregnant woman to run, may not reflect the reality of most pregnant women, especially in the third quarter.

The Pregnancy Mobility Index (PMI) was developed specifically for pregnant women with PRLSP, assessing their ability to perform daily activities. It is possible to evaluate the mobility and quality of life of the pregnant woman<sup>29</sup>.

The Pelvic Girdle Questionnaire (PGQ) is a specific instrument to measure the PP during pregnancy and postpartum<sup>30</sup>. The Brazilian version of the questionnaire was validated in 2014 and helps to evaluate and monitor the impact that PRPP can have on the functionality of pregnant women, considering all the social and cultural context in which they are inserted, as well as helping to find more appropriate ways to plan a specific treatment for this condition<sup>31</sup>. Thus, the development of specific questionnaires for PRLSP and its subtypes may facilitate the diagnosis and help with the appropriate treatment.

Although the diagnosis of PRLSP is basically clinical, the use of imaging exams may be necessary, especially when warning signs are present. Preferably, one should opt for those with non-ionizing radiation, such as ultrasonography and magnetic resonance imaging (MRI). Despite the fear that MRI could induce teratogenicity, acoustic lesion and heating effects in the fetus, no changes were observed when 1.5T devices were used. The safety of the 3T devices is not established yet<sup>32</sup>. In 2013, the American College of Radiology recommended MRI to be used in pregnant women, independently of the gestational age when the benefits are greater than the risk<sup>33</sup>.

Regarding the exams that use ionizing radiation, doses lower than 50mGy, when administered in gestations above two weeks, they seem to be very low to be clinically detected. Doses between 50 and 100mGy, when administered between 2 and 25 weeks, can be teratogenic but do not show a teratogenic effect in pregnancies above 25 weeks. Doses above 100mGy have the potential for fetus injury, especially in pregnant women who may undergo further exams, leading some authors to discuss the indication to abort<sup>34</sup>.

## PROGNOSIS

Inadequate follow-up and management of pregnant women with PRLBP and PRPP may lead to chronic pain. Persistent PRLSP, both recurrent and continuous, is directly related to the symptoms during pregnancy. While most of the pregnant women show improvement in the first six months after delivery, some women will experience the symptoms for a prolonged time<sup>16</sup>. After delivery, there is a higher demand for activities that increase the intensity of LBP, such as lifting and carrying weight. It is difficult to avoid these activities due to the necessary care required by the newborn<sup>35</sup>.

A study that evaluated 464 pregnant women with PRLSP during pregnancy showed that 43.1% had pain six months after delivery, 36.2% had recurrent pain, while 6.9% had continuous pain<sup>36</sup>.

Pregnant women with more pronounced symptoms (continuous pain) are more likely to be away from work and to use health services than women with less pronounced symptoms (recurrent pain). Pregnant women with more pronounced symptoms may fall in a specific subgroup of pregnant women with persistent PRPP where the prognosis is less favorable<sup>37</sup>.

Pregnant women with PRPP can have serious consequences several years after pregnancy. One in 10 can have pain up to 11 years postpartum, especially those with a history of PRLSP in previous pregnancies, higher number of positive tests for pain provocation and pressure tests on the pubic symphysis, positive Trendelenburg or Faber<sup>38</sup>. The pregnant woman should be evaluated during pregnancy and in the postpartum period and treated appropriately to avoid suffering, costs increase and to reduce the chance of a transition to chronicity.

Subgroups of pregnant women with PRLSP should be identified and directed to specific treatments. Pregnant women classified as having combined pain (LBP and PP), especially at the beginning of pregnancy, should receive special attention since they have a higher intensity of symptoms and a greater chance of chronification<sup>39</sup>.

## TREATMENT

The treatment of PRLSP is a difficult task because of the myth that it is a normal condition in pregnancy and the fear that the treatment will cause changes in the pregnant woman and the fetus. One of the treatment strategies is based on prevention. When seeking effective pain management, conservative measures are more often used for obvious reasons, although these treatments typically do not show high success rates. Treatment options include physiotherapy, transcutaneous electrical nerve stimulation, pharmacological treatment, acupuncture, the use of pelvic belts, among others.

## EXERCISES

Exercise-based treatment is the most common component in PRLSP management. Stabilization exercises are the most commonly used techniques, followed by pelvic floor exercises, strengthening exercises and repeated directional exercises<sup>40</sup>.

In a Cochrane review of 2015 that evaluated the effects of any intervention to prevent or treat LBP, PP or the association of both in women at any stage of pregnancy, soil exercises in their various formats reduced the pain scores and the functional impairment in pregnant women with LBP, with an additional improvement when information on pain management is provided to the pregnant woman. Hydrotherapy seems to reduce the incidence of absenteeism in pregnant women with LBP. Regarding PP, physical activity does not seem to improve the prognosis when compared to usual prenatal care. Moreover, acupuncture appears to be superior to stabilization exercises to reduce PP. Although LBP and PP are distinct diseases and cannot be directly compared, the exercises, when compared to usual prenatal care, do not seem to improve the prognosis of PP. These observations suggest that the stabilization of the anatomical source of the symptoms is paramount for the proper management of the pain<sup>12</sup>.

## PHYSICAL MEASURES

The use of simple devices, such as a nest-shaped pillow, may be helpful to reduce pain and insomnia in later stages of pregnancy.

The pillow supports the abdomen when the pregnant woman adopts the lateral decubitus position, and it seems to lessen the symptoms<sup>41</sup>.

Another device is the pelvic belt, which acts by pressing the joint surfaces promoting stability and reducing the mobility of the sacroiliac joint, with a reduction in pain. The use of non-rigid pelvic belts significantly reduces the pain scores and functional impairment compared to stabilization exercises. They should be used only for a short time<sup>12</sup>.

## ACUPUNCTURE

The use of acupuncture for the treatment of PRLSP is increasing over the years, and several studies have shown its analgesic potential in pregnant women with PRLSP when compared to control<sup>42,43</sup>. Acupuncture seems to relieve LBP and pelvic girdle pain during pregnancy. In addition, it increases the ability to perform some physical activities and helps decrease the need for drugs, which is a good advantage in that period<sup>20</sup>. Acupuncture seems to stimulate the endogenous opioids system<sup>12</sup>. When used as an adjuvant, acupuncture provides greater pain reduction than the standard treatment alone, improving daily activities in pregnant women with PRLSP<sup>44,45</sup>. Although it is considered a safe technique, acupuncture should be performed by experienced people, since some points that supply the uterus and cervix should be avoided, as they may induce labor<sup>24</sup>.

## PHARMACOLOGICAL TREATMENT

Paracetamol is the first-line analgesic in the treatment of pain during the pregnancy. It is a non-opioid analgesic and, although the mechanism of action is not yet completely known, it can inhibit the synthesis of central prostaglandin and modulate the serotonergic descending inhibitory pathways. At the recommended doses, the use of paracetamol during pregnancy is safe<sup>46</sup>. Nonsteroidal anti-inflammatory drugs (NSAIDs) are usually second-line analgesics. Due to the risk of early fetal loss, oligohydramnios, fetus renal injury, and premature closing of the arterial duct, NSAIDs during pregnancy must be used with caution<sup>47</sup>. Antidepressants, anticonvulsants, local anesthetics and clonidine can be a good alternative during pregnancy. Amitriptyline, due to the time of use and a large number of published studies, seems to be a good option for the treatment of neuropathic pain during pregnancy since it was not associated with an increased incidence of malformations<sup>48</sup>. Venlafaxine also appears to be unrelated to increased malformations<sup>49</sup>. However, the use of high doses of antidepressants during pregnancy, or their use near the term, can lead to neonatal withdrawal syndrome. Sodium valproate has a possible teratogenic effect, alteration of the neurological development<sup>50</sup>. Some countries have already banned its use in pregnant women and women of childbearing potential with bipolar disorders<sup>51</sup>. There are only a few reports of pregnant women using gabapentin, and there is no evidence of an increase in the incidence of malformations<sup>52</sup>. It may be related to an increased risk of fetal loss, restricted intrauterine



growth, and preterm birth<sup>53</sup>. It has a C classification by the Food and Drug Administration (FDA) and B3 by the Australian Drug Evaluation Committee (ADEC).

Regarding pregabalin, it does not appear to be associated with a significant increase in malformations when used in the first quarter, mainly as a monotherapy<sup>54</sup>. Cyclobenzaprine is considered safe during pregnancy and is one of the most commonly used analgesics for the treatment of PRLSP. Despite a report of early closure of the arterial duct, it is widely used in pregnant women<sup>55</sup>. It has a B classification from the FDA. During lactation, about 50% of the drug passes to the breast milk. Most opioids are considered class B or C during pregnancy by the FDA, being considered D mainly in the third quarter due to the risk of neonatal withdrawal syndrome. However, it is prudent to evaluate each drug individually. Codeine is not related to the increased incidence of malformations and fetal survival rate, and it is classified as A by ADEC<sup>56</sup>. Tramadol seems to be related to an increase in the incidence of malformations (clubfoot and cardiovascular defects) when used near conception, not causing significant effects when used in later stages of pregnancy<sup>57,58</sup>. It is considered Class C by the FDA and ADEC. There are no reports of malformations related to morphine when used in the first quarter, but it should be used with caution. Newborns exposed to opioids with shorter half-lives, such as morphine, are more likely to have neonatal withdrawal syndrome<sup>59,60</sup>. It is Class B by the FDA and C by ADEC. Transdermal fentanyl seems to be a good option for the treatment of chronic pain during pregnancy and lactation. Although it may cause neonatal withdrawal syndrome when used at high doses or close to term, it does not appear to pass to the breast milk<sup>61</sup>. Most opioid treatments during pregnancy are of short duration, but women who use opioids chronically before pregnancy keep on their use, often until the term. While long-term treatment with opioids in pregnancy is not recommended, it may be necessary in the case of chronic pain or treatment of dependence. Methadone and buprenorphine may be used to prevent withdrawal syndrome<sup>62</sup>.

## NON-SURGICAL TREATMENTS

The use of steroids in the epidural space during pregnancy is controversial, although one dose is of low risk for the fetus. Its use is indicated in pregnant women with new symptoms, consistent with compression of the lumbar nerves (for example, unilateral loss of deep reflex, motor and sensitive alterations in the distribution of one dermatome)<sup>63</sup>. There are case reports describing the peridural administration of steroids in pregnant women with sciatica and signs of radicular pain with the improvement of the feeling of pain, but some evolved for the surgical treatment due to recurrence or progression of the neurological symptoms. In patients with PRLSP, the peridural analgesia seems to have a good result, given either as a single dose or for a short time interval in the periods of increased pain. However, whatever is the case, it should be considered as a temporary method of pain relief until birth<sup>17</sup>. The administration of steroids and local anesthetics on the pubic symphysis and sacroiliac joints has also been reported with good analgesic response<sup>64</sup>.

## SURGICAL TREATMENT

The role of surgery for the treatment of PRLSP during pregnancy is limited. When indicated, it is required good coordination between the surgeon and the obstetrician. The prone position may be used in the first quarter, but in the second, the lateral decubitus for either side may be used. In the third quarter, the left lateral decubitus should be used due to the compression of the vena cava by the gravid uterus, but as of the 34<sup>th</sup> week, the pregnancy interruption should be discussed. As of the 23<sup>rd</sup> week, the fetal heart rate should be monitored<sup>64</sup>.

There are reports in the literature of surgical interventions during pregnancy for the treatment of disc herniations causing neurological deficits (sensory, motor, bladder and/or intestinal alterations), including discectomy, microdiscectomy, laminectomy, and endoscopic surgery. Surgery, when well indicated, has a good success rate and a return of the function, with no increase in morbidity or mortality<sup>63</sup>.

## CONCLUSION

PRLSP is a common pathological condition that can occur in most pregnant women. Despite this, there are still questions about the diagnosis and proper management of this condition. On the other hand, the localization of the pain is common to other conditions, being important the search for warning signs as pain irradiating to the leg, neurological deficits (paresthesia and/or weakness), alterations in intestinal and bladder functions, fever, amongst others. Although the clinical diagnosis is more common and adequate, in some cases, it is necessary to perform imaging tests, preferably the techniques that do not use non-ionizing radiation (ultrasound and MRI). The treatment of PRLSP is a difficult task because it is considered a normal condition during pregnancy and there is the fear that the treatment may cause changes in the pregnant woman and the fetus. One of the treatment strategies is based on prevention. When seeking effective pain management, conservative measures are more often used for obvious reasons, although these treatments typically do not show high success rates. The most commonly used drugs are paracetamol and NSAIDs. For more intense pain, opioids can be used, but they should not be administered for prolonged periods or close to the term. The use of epidural or joint blockades is being reported with good results. The surgical treatment is restricted to more severe cases but, when well indicated, it has a good success rate and the return of function, with no increase in morbidity or mortality. Thus, it is very important that health professionals know that there are safe strategies for the management of PRLSP that reduces the suffering and brings comfort to the pregnant woman.

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