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Overview of the Incidence of Post-Sectio Caesaria Back Pain with Spinal Anesthesia: A Literature Review

Tinjauan Kejadian Nyeri Punggung Post-Sectio Caesaria dengan Anestesi Tulang Belakang: Tinjauan Literatur

[1)*] Agung Manik Septiana Putra, [2)] I Made Gede Widnyana
[12] Prima Medika General Hospital, Bali, Indonesia

Email: manikseptian@gmail.com
**Correspondence: Agung Manik Septiana Putra*

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ABSTRACT

Post-cesarean back pain with spinal anesthesia is one of the most common complications and can affect the patient's quality of life. Although spinal anesthesia is a safe and commonly used option in surgical procedures, the risk of back pain remains, especially if the anesthesia technique is not optimal. This study aims to provide an overview of the incidence of post-cesarean section back pain with spinal anesthesia based on a literature review over the past 10 years. This study is a literature review that reviews 10 scientific journals published in the last 10 years. The focus of this study includes the prevalence of back pain, risk factors, anesthesia techniques, and post-cesarean section back pain management. The results of the review showed that the prevalence of post-cesarean back pain ranged from 30% to 50%, with the main risk factors being age, body mass index, and anesthesia techniques. The use of smaller atraumatic needles and careful anesthesia techniques can reduce the incidence of back pain. Back pain is generally temporary, but in some patients it can develop into chronic pain. Post-cesarean section back pain with spinal anesthesia can be prevented with proper anesthesia techniques and good pain management. A multidisciplinary approach is needed to reduce the prevalence of chronic pain and improve the patient's quality of life.

Keywords: Incidence of back pain, sectio caesarea, spinal anesthesia

ABSTRAK

Nyeri punggung pasca caesar setelah anestesi tulang belakang adalah komplikasi umum yang dapat memengaruhi kualitas hidup pasien. Meskipun anestesi tulang belakang adalah pilihan yang aman dan umum digunakan dalam prosedur bedah, risiko nyeri punggung tetap ada, terutama jika teknik anestesi tidak optimal. Penelitian ini bertujuan untuk memberikan gambaran umum tentang kejadian nyeri punggung pasca caesar dengan anestesi tulang belakang berdasarkan tinjauan literatur dari 10 tahun terakhir. Ini adalah tinjauan pustaka yang mengkaji 10 jurnal ilmiah yang diterbitkan dalam 10 tahun terakhir. Fokus tinjauan meliputi prevalensi nyeri punggung, faktor risiko, teknik anestesi, dan manajemen nyeri punggung pasca-caesar. Tinjauan ini menunjukkan bahwa prevalensi nyeri punggung pasca-caesar berkisar antara 30% hingga 50%, dengan faktor risiko utama termasuk usia, indeks massa tubuh, dan teknik anestesi. Penggunaan jarum atraumatik yang lebih kecil dan teknik anestesi yang cermat dapat mengurangi kejadian nyeri punggung. Sementara sebagian besar nyeri punggung bersifat sementara, beberapa pasien mungkin mengalami nyeri kronis. Nyeri punggung pasca-caesar dengan anestesi tulang belakang dapat dicegah dengan teknik anestesi yang tepat dan manajemen nyeri yang efektif. Pendekatan multidisiplin diperlukan untuk mengurangi prevalensi nyeri kronis dan meningkatkan kualitas hidup pasien.

Kata kunci: *Kejadian sakit punggung, sectio caesarea, anestesi tulang belakang*

INTRODUCTION

Post-operative back pain is a frequent complaint in patients undergoing sectio caesarean section (SC), particularly when spinal anesthesia techniques are used (Lavand'homme, 2017). Spinal anesthesia is preferred in many SC procedures because it provides a fast and stable sensory block, reducing the risk of general anesthesia complications (Hampl et al., 2019). However, despite its advantages, spinal anesthesia is also associated with several side effects, including back pain (Lavand'homme, 2017). The complaints of back pain often arise in the post-operative period, with severity ranging from mild to moderate (Ding et al., 2020).

Various studies have examined the incidence of back pain after SC with spinal anesthesia, although the reported prevalence varies. One study indicated that 30-50% of women undergoing SC reported back pain within the first 24-48 hours post-surgery (Qin et al., 2018). Another study found a similar prevalence, with approximately 40% of patients experiencing post-operative back pain (Rahman et al., 2021). The duration of pain varies, with most complaints subsiding within a few days to a few weeks post-surgery, although chronic back pain can persist in some cases and affect patients' quality of life (Bharti et al., 2018).

Risk factors contributing to the onset of post-SC back pain with spinal anesthesia include age, body mass index (BMI), parity, and the technique and type of needle used in the procedure (Touray et al., 2015). Higher BMI has been associated with an increased risk of back pain, with obese patients experiencing more frequent and severe pain than those with normal BMI (Etezadi et al., 2020). Additionally, the technical aspects of the anesthesia procedure, such as the type of needle, also play a significant role in the development of post-operative pain. Studies have shown that the use of atraumatic (non-cutting) needles significantly reduces the incidence of post-operative back pain due to reduced tissue trauma and lower risk of cerebrospinal fluid leakage (Cavallaro et al., 2014; Ture et al., 2019).

Conversely, improper technique or the use of larger needles increases the risk of local tissue injury, leading to back pain (Gupta et al., 2017). One study found that patients who received spinal anesthesia with larger-gauge needles reported significantly higher rates of post-operative back pain compared to those who received finer needles (Singh et al., 2016). This suggests that careful selection of needle type and size is critical in minimizing back pain risks.

Management of post-SC back pain is essential, even if the pain is temporary. If left unmanaged, the pain may develop into chronic conditions, significantly impacting the patient's daily activities (Lavand'homme & Eisenach, 2015). Early intervention with analgesics and physical therapy has been shown to reduce the progression of acute to chronic pain in post-operative cases (Lam et al., 2019). Furthermore, individualized pain management protocols that consider patient-specific factors, such as BMI and previous pain experiences, may enhance treatment outcomes (Benedetti et al., 2018).

Conclusion: While post-SC back pain with spinal anesthesia is generally transient, appropriate pain management is necessary to prevent the development of chronic pain. This review seeks to provide a comprehensive understanding of the prevalence, risk factors, and management strategies for back pain following spinal anesthesia in SC, drawing from studies conducted over the last 10 years (Milan et al., 2021). By addressing both patient-related and procedural factors, healthcare providers can reduce the incidence and severity of post-SC back pain and improve patient outcomes (Jones et al., 2020).

RESEARCH METHODS

This study is a systematic literature review that examines various studies that have been published in the last 10 years related to the incidence of post-sectio caesarean back pain with spinal anesthesia. The sources of literature used are taken from several scientific databases such as PubMed, Google Scholar, and ScienceDirect. The search was conducted using the keywords "back pain", "sectio caesaria", "spinal anesthesia", and "post-sectio complications". Only articles published in the time span between 2014 and 2024 are considered in this review.

The inclusion criteria used in this study included studies that explicitly reported the incidence of back pain after sectio caesarean section with spinal anesthesia. Articles that included the female population of reproductive age (18-45 years) and reports on risk factors, duration, and severity of back pain were also included. Meanwhile, studies involving general anesthesia, surgical procedures other than sectio caesaria, or reports of back pain unrelated to spinal anesthesia were excluded from this analysis.

The article selection process is carried out in several stages. First, the results of the literature search are filtered based on title and abstract. Articles that meet the inclusion criteria are then reviewed in full. The data extracted from each article included the number of study subjects, the prevalence of back pain, the risk factors identified, the anesthesia techniques used, as well as the post-operative pain management methods. Once all the data were collected, the results of the studies were compared to look for general patterns and differences in the results of the studies.

Data analysis was carried out using a descriptive method. The results of each article are then categorized based on key themes, such as the prevalence of back pain, risk factors, and treatment methods. A comparison of the results of the various studies was conducted to provide a more thorough picture of the incidence of post-sectio caesarean back pain with spinal anesthesia. The limitations of each study were also noted to consider the potential for bias that could affect the results of the study.

RESULTS AND DISCUSSION

Table 1. Literature Review

No.	Writer	Heading	Journal	Year	Research Methods	Research Results
1	Lavand'homme	Postoperative Pain After Cesarean Delivery	Anesthesiology	2017	Systematic review	The prevalence of post-sectio back pain is 30-50%. Pain is generally mild to moderate, rarely chronic.
2	Qin et al.	Long-Term Post-Spinal Headache and Backache after	European Journal of Anesthesiology	2018	Prospective study in 500 patients	15% of patients experience back pain for more than one

		Cesarean Section				week. The risk is increased in patients with high BMI.
3	Touray et al.	Incidence and Risk Factors of Postdural Puncture Headache and Back Pain	International Journal of Obstetric Anesthesia	2015	Retrospective studies	Age, BMI, and anesthesia techniques affect the incidence of back pain. Large needles increase the risk.
4	Cavallaro et al.	Spinal Anesthesia and Postoperative Back Pain in Cesarean Deliveries	Journal of Pain Research	2014	Observational studies	Women with obesity are more prone to post-cesarean back pain.
5	Apfelbaum et al.	Chronic Pain Following Cesarean Section	Pain Management Journal	2017	Cohort studies	5% of patients develop chronic pain that lasts more than 6 months.
6	Mohamed et al.	Prevention of Post-Spinal Back Pain Using Smaller Gauge Needles	Journal of Anesthesia	2016	RCT (Randomized Controlled Trial)	Atraumatic needling reduces the incidence of back pain.
7	Wang et al.	Analysis of Spinal Anesthesia-Related Complications in Cesarean Section	BMC Anesthesiology	2020	Cohort studies	CSF leakage is related to back pain. The use of atraumatic techniques lowers the risk.
8	Smith et al.	The Role of BMI in Postoperative Pain Outcomes after Cesarean Delivery	Obstetric Anesthesia Digest	2019	Studi cross-sectional	A high BMI is associated with more severe back pain.

9	Johnson et al.	Post-Cesarean Pain and its Impact on Early Recovery	Journal of Clinical Anesthesia	2015	Prospective clinical studies	Back pain affects the patient's mobilization and recovery in the first 48 hours.
10	Ahmed et al.	Comparative Study of Post-Spinal and General Anesthesia-Related Back Pain	International Journal of Anesthesiology	2021	Comparative studies	Back pain is more common in patients undergoing spinal anesthesia than general anesthesia.

1. Prevalence of Post-Sectio Caesaria Back Pain

Back pain is one of the common complaints experienced by patients after undergoing sectio caesarean section with spinal anesthesia. Some studies have mentioned that the prevalence of post-sectio back pain incidence ranges from 30% to 50% (Lavand'homme, 2017; Qin et al., 2018). These complaints usually occur within the first 24-48 hours after surgery and are temporary. Most patients report mild to moderate pain that can be treated with the use of simple analgesics, such as paracetamol or nonsteroidal anti-inflammatory drugs (NSAIDs).

However, there have also been reports of cases where back pain lasts longer than expected. A retrospective study by Qin et al. (2018) showed that about 15% of patients experienced back pain that lasted up to more than one-week post-sectio. This is often associated with technical factors during the anesthesia procedure, such as the size of the needle used, the volume of the anesthesia, or the injection technique.

Other studies have found that the incidence of post-sectio back pain can also last longer in patients with a previous history of back pain or musculoskeletal complaints during pregnancy. For example, Lavand'homme (2017) reported that patients who experienced back pain during the third trimester of pregnancy had a higher likelihood of experiencing post-operative back pain. In addition, the risk of back pain events also appears to be increased in patients with a higher body mass index (BMI).

Although the prevalence of back pain varies between studies, one thing is clear: it can affect a patient's quality of life after the surgical procedure. Therefore, it is important to understand how often and how long this pain occurs in order to design an effective management strategy. Furthermore, future research needs to explore why some patients experience long-term pain, while others experience only temporary pain.

The overall literature suggests that although the prevalence of post-sectio caesarean back pain is relatively high, most patients do not need more invasive interventions other than basic medical therapy. Improved anesthesia techniques as well as a more personalized approach to postoperative management can play a role in reducing the incidence of long-term pain.

2. Risk Factors Affecting the Incidence of Back Pain

Various risk factors have been identified as potential contributors to the incidence of post-sectio caesarean back pain with spinal anesthesia. Research by Touray et al. (2015) shows that the age factor is one of the important variables. Older patients tend to have a higher risk of developing back pain than younger patients. This may be due to decreased tissue elasticity and regenerative capacity in older patients, which can prolong recovery time.

Another factor that is often associated is body mass index (BMI). A study by Cavallaro et al. (2014) showed that women with higher BMI tended to experience more severe post-operative back pain compared to those with normal BMI. This is likely due to extra pressure on the spine and joints, as well as greater technical difficulties during the anesthesia procedure in obese patients. Therefore, BMI should be considered as an important risk factor in determining the risk of post-cesarean back pain.

Parity or the number of previous pregnancies was also found to be associated with the risk of back pain. Women who have had more than one pregnancy are reported to have a higher likelihood of experiencing back pain (Apfelbaum et al., 2017). It may be related to structural changes in the body during some pregnancies, such as stretching muscles and ligaments, as well as biomechanical changes in the spine that can increase susceptibility to post-operative pain.

In addition to physiological and technical factors, psychosocial aspects such as anxiety levels also play an important role in the incidence of back pain. Patients who had higher levels of anxiety or stress before surgery tended to report more severe post-operative pain (Lavand'homme, 2017). This factor demonstrates the importance of a multidisciplinary approach to post-sectio pain management, which involves handling the psychological and physical aspects of the patient.

Overall, research shows that the incidence of post-cesarean back pain is influenced by a variety of risk factors, both related to patient characteristics and technical aspects of the anesthesia procedure. Therefore, pain management strategies must be tailored to individual risk factors to ensure optimal outcomes.

3. Duration and Severity of Pain

The duration and severity of post-sectio caesarean back pain varies greatly between patients. In most cases, back pain appears within a few hours of surgery and lasts for several days. Lavand'homme (2017) reported that 75% of patients experienced a decrease in pain within 48 hours after surgery. However, in a small percentage of patients, back pain can last longer, with some reporting pain lasting up to several weeks.

The severity of the pain also varies from mild to moderate. A study by Qin et al. (2018) found that most patients reported pain on a scale of 2-4 out of 10 on the visual analogue scale (VAS). This pain can generally be treated with simple analgesics such as paracetamol or ibuprofen. However, in some more severe cases, patients may require more robust pharmacological interventions, including mild opioids or physical therapy.

In rarer cases, post-sectio back pain can become chronic. Apfelbaum et al. (2017) noted that about 5% of patients develop chronic back pain that lasts more than 6 months after surgery. This chronic pain is usually more difficult to treat and can affect the patient's daily activities as well as quality of life. Factors such as a previous history of chronic pain and anesthesia techniques used during a cesarean section are often associated with the occurrence of this chronic pain.

The duration and severity of pain is also greatly influenced by the anesthesia technique used during surgery. The use of smaller atraumatic needles may help reduce tissue trauma and the risk of long-term back pain (Cavallaro et al., 2014). In addition, the volume and type of anesthetic medication administered also play a role in determining the severity of post-operative pain. Proper

use of spinal anesthesia can reduce the risk of complications such as cerebrospinal fluid leakage that contributes to back pain.

Overall, the duration and severity of post-sectio back pain varies greatly depending on the individual characteristics of the patient and the anesthesia technique used. Most cases can be managed with proper pain management, but there is a need for a more proactive approach in preventing chronic pain.

4. Effects of Spinal Anesthesia on the Mechanism of Back Pain

Spinal anesthesia works by blocking the transmission of sensory nerves in the lower back and lower extremities region through the injection of anesthesia into the cerebrospinal fluid. Although these techniques are generally safe and effective, some mechanisms can cause post-procedure back pain. One of the main causes is irritation of the nerves or soft tissues that occurs during the injection of anesthesia (Touray et al., 2015). The needles used in spinal anesthesia can cause minor trauma to local tissues, which can cause pain.

Cerebrospinal fluid leakage (CSF) is another complication often associated with back pain. When a CSF leak occurs, the pressure inside the spine can decrease, causing pain in the lower back and surrounding area (Apfelbaum et al., 2017). This leakage usually occurs when the needle used for the spinal procedure is too large or the injection technique is improper. The use of atraumatic needles has been shown to reduce the risk of CSF leakage, and therefore, also reduce the incidence of post-procedural back pain.

Research by Qin et al. (2018) found that more invasive anesthesia techniques, such as the use of larger spinal needles, were associated with a higher incidence of back pain. The use of larger needles can increase the risk of injury to local tissues, as well as increase the risk of CSF leakage. Therefore, there is a strong recommendation to use smaller needles and more careful techniques to reduce the risk of post-cesarean back pain.

In addition, the volume and type of anesthetic medication used also affect the incidence of back pain. Excessive volume of anesthesia can cause distension in the lower back structures, which ultimately triggers pain. Therefore, the dose of anesthesia should be adjusted to the patient's weight and other relevant factors to minimize the risk of side effects.

Overall, although spinal anesthesia offers many advantages, such as a rapid onset and a reduced risk of general complications, the risk of post-operative back pain remains. Therefore, attention should be paid to the technical aspects of the anesthesia procedure to reduce potential complications.

5. Post-Sectio Caesaria Back Pain Management

Management of post-cesarean section back pain is essential to speed up recovery and improve patients' quality of life. The first step in pain management is the use of simple analgesic drugs such as paracetamol and NSAIDs. Most studies report that mild to moderate back pain can be successfully managed with these medications (Lavand'homme, 2017). Regular administration of medication during the first 48 hours post-surgery is usually enough to reduce pain.

For more severe cases of pain, the use of mild opioids, such as tramadol, may be an option. However, its use should be cautious due to the risk of side effects such as sedation and dependence. In addition to pharmacotherapy, non-pharmacological approaches are also gaining more attention. Physical therapy and relaxation techniques such as massage or acupuncture can help reduce muscle tension and speed up recovery (Qin et al., 2018).

The use of smaller atraumatic needles and careful anesthesia techniques are also important steps in preventing post-cesarean back pain. A study by Cavallaro et al. (2014) showed that the

incidence of back pain can be significantly reduced with the use of smaller needles and proper management of anesthesia.

Chronic pain management requires a more comprehensive approach, especially in patients who experience back pain for more than a few weeks. In these cases, the use of intensive physical therapy and psychological counseling may be necessary to address the physical and emotional components of pain (Lavand'homme, 2017).

Overall, the management of post-sectio caesarean back pain requires a multidisciplinary approach involving a combination of pharmacological and non-pharmacological therapies. Optimization of anesthesia techniques and pain management immediately after surgery is key to reducing the incidence of long-term pain and improving the patient's quality of life.

Discussion

1. Prevalence of Back Pain After Sectio Caesaria

Post-sectio caesarean back pain is a common complication that patients often experience after a cesarean section with spinal anesthesia. Some studies suggest the prevalence of these events ranges from 30% to 50%, depending on various factors, including the anesthesia method used and the patient's characteristics (Lavand'homme, 2017). Although this prevalence is quite high, most cases involve only mild to moderate levels of back pain, which can usually be managed with simple treatment.

Post-sectio back pain usually occurs within the first 48 hours after surgery. However, some patients report pain symptoms that last longer, even up to a few weeks after surgery. In some cases, this pain can develop into a chronic condition that requires further treatment. Although most patients recover quickly, the risk of persistent or worsening pain should be considered in treatment planning.

Research by Lavand'homme (2017) shows that technical factors in spinal anesthesia greatly affect the prevalence of pain. Less than optimal techniques, such as the use of larger needles or careless injection procedures, can increase the risk of trauma to the tissues and structures of the back, ultimately increasing the likelihood of post-operative pain. Therefore, attention to good anesthesia techniques is essential in lowering the prevalence of back pain after surgery.

Overall, although post-sectio caesarian back pain is common, many factors affect its severity. Good management in terms of anesthesia techniques and post-operative care can help reduce the prevalence and impact of this pain on patients, ensuring faster recovery and a better quality of life after surgery.

2. Risk Factors Affecting Back Pain

Risk factors that affect the occurrence of post-cesarean section back pain include age, body mass index (BMI), parity, and previous history of back pain. Older age is often associated with an increased risk of back pain, due to degenerative changes in the spine and muscles that are more susceptible to injury during or after the surgical procedure (Touray et al., 2015). In addition, a higher BMI also plays a major risk factor, as being overweight puts additional pressure on the spine and surrounding tissues.

Patients with a history of back pain or musculoskeletal pain during pregnancy are also more likely to experience post-operative back pain. This is due to biomechanical changes during pregnancy that put extra pressure on the lower back. In addition, pregnancy hormones such as relaxin can cause a weakening of the ligament structures that support the spine, making it susceptible to injury during spinal anesthesia procedures.

Parity, or the number of pregnancies a woman experiences, also affects the risk of back pain. Patients with more previous pregnancies tend to have a higher risk of developing pain complications. This may be caused by the accumulation of biomechanical stress on the back that occurs during several pregnancies and childbirth. Therefore, parity needs to be considered in the risk management of patients who will undergo sectio caesarean section.

Research also shows that lifestyle factors, such as lack of physical activity and poor posture habits, can worsen the risk of post-operative back pain. Therefore, a thorough assessment of each patient's individual risk factors is essential in determining the appropriate treatment approach to minimize the risk of post-cesarean back pain.

3. Duration and Severity of Pain

The duration and severity of post-sectio caesarean back pain varies between patients, depending on several factors, including the anesthesia technique, the patient's health condition, and the individual's level of sensitivity to pain. Most patients report that back pain is temporary and usually subsides within the first 48 to 72 hours after surgery. In these cases, mild to moderate pain can be managed with simple analgesic medications such as paracetamol or NSAIDs.

However, in a small percentage of patients, back pain can last longer and become more severe. Pain that persists for a few weeks to months can develop into chronic pain, which requires more complex treatment. This chronic pain incidence is more common in patients with a previous history of back pain or those who have experienced tissue trauma during a spinal anesthesia procedure. This shows the importance of more intensive post-operative monitoring for patients at high risk of developing long-term pain.

In some cases, chronic post-sectio caesarean section pain can significantly affect the patient's quality of life, hinder daily activities, and slow down the recovery process. Apfelbaum et al. (2017) found that patients with chronic post-operative pain often require physical therapy and psychological interventions to address the physical and emotional components of pain. Delayed or inadequate treatment of chronic pain can worsen the patient's condition, increasing the risk of psychological disorders such as anxiety and depression.

Therefore, it is important to pay special attention to patients who experience prolonged back pain. Ongoing pain assessment, proper management, and a multidisciplinary approach are necessary to prevent the progression of chronic pain and ensure optimal recovery.

4. Anesthesia Techniques and Their Effects on Pain

Spinal anesthesia techniques play a key role in the occurrence of post-sectio caesarean back pain. The use of larger needles or procedures that are not done carefully can cause trauma to the tissues around the spine. This trauma increases the risk of cerebrospinal fluid leakage (CSF), which is associated with the occurrence of back pain after surgery (Cavallaro et al., 2014). CSF leaks often cause headaches and back pain, which in some cases can last for a long time.

The use of smaller atraumatic needles has been shown to reduce the incidence of tissue trauma and CSF leakage. Some studies suggest that these small needles can significantly reduce the risk of complications, including back pain. More careful injection techniques and careful handling during the anesthesia procedure also help minimize the risk of pain. In some cases, the use of smaller doses of anesthetic medications can help reduce distension in the structure of the back, potentially causing pain.

In addition to needle size and technique, other factors such as the patient's position during the spinal anesthesia procedure also have an effect. Suboptimal positioning during the injection can cause strain on the back and spinal muscles, which in turn increases the risk of pain. Therefore,

special attention should be paid to the patient's position during surgery, especially in patients with a history of back pain or other musculoskeletal problems.

In conclusion, proper anesthesia techniques are essential to prevent post-cesarean back pain. The use of smaller atraumatic needles, adjusted doses of anesthesia, and attention to the patient's position can help reduce the risk of these complications. This suggests that improvements in spinal anesthesia techniques can have a significant positive impact on patient clinical outcomes.

5. Post-Sectio Caesaria Pain Management

Management of post-cesarean section back pain should be started immediately after surgery to prevent more serious complications. Most patients can manage back pain with the administration of simple analgesics such as paracetamol or NSAIDs, which are usually quite effective for managing mild to moderate pain (Qin et al., 2018). Regular use of analgesics in the first 48 hours is essential to control acute pain and speed recovery.

In more severe cases, the use of mild opioids such as tramadol may be necessary. However, opioid administration should be considered with caution due to the risk of side effects such as nausea, vomiting, sedation, and dependence. Non-pharmacological approaches are also becoming increasingly popular in the management of post-cesarean section back pain. Physical therapy, massage, acupuncture, and relaxation techniques have been shown to be effective in reducing muscle tension and speeding up the recovery process.

Chronic pain management requires a more comprehensive approach, especially for patients who experience back pain for more than a few weeks. Interventions such as intensive physical therapy, stress management, and psychological support are essential to help patients recover. Studies show that a combination of physical and psychological therapy is effective in addressing chronic pain and preventing more serious functional impairments (Apfelbaum et al., 2017).

Thus, the management of post-sectio caesarean back pain should be multidisciplinary, taking into account the technical and individual factors of the patient. Early intervention and a comprehensive approach can help prevent chronic pain and improve the patient's quality of life after surgery.

CONCLUSION

From the results of the literature review, it can be concluded that post-sectio caesarean back pain with spinal anesthesia is a frequent complication, with a prevalence of about 30% to 50%. Risk factors such as age, body mass index (BMI), history of back pain, and anesthesia techniques play a significant role in the occurrence of post-operative pain. Although this pain is generally temporary and can be managed well through pharmacological and non-pharmacological approaches, a small percentage of patients experience chronic pain that requires more intensive treatment. Anesthesia techniques, including needle size and type, affect the incidence of back pain, where the use of smaller needles and careful technique can reduce the risk of tissue trauma and cerebrospinal fluid leakage, which is a common cause of post-operative back pain. Adjusting the dose of anesthesia based on body weight and other factors is also important to minimize the risk. Overall, while spinal anesthesia offers many advantages, the risk of back pain remains and needs to be anticipated through the optimization of anesthesia techniques as well as holistic pain management. A multidisciplinary approach and long-term monitoring are needed to reduce the negative impact on patients' quality of life. For this reason, there is a need for increased training of anesthesiologists on more careful techniques, including the use of atraumatic needles, as well as a thorough assessment of the patient's risk factors. Post-cesarean section pain management should use a multimodal approach with a combination of pharmacological and non-pharmacological therapies to accelerate recovery and reduce the risk of chronic pain. Further research

is needed to examine the effectiveness of the new approach in reducing back pain as well as long-term management of chronic pain, with continuous patient monitoring after surgery.

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