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## EFFECTS OF PREGABALIN VS GABAPENTIN ON PAIN INTENSITY IN PATIENTS WITH CHRONIC SCIATICA IN BMCH HOSPITAL QUETTA

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### Abstract

**Background:** Sciatica is a challenging neuropathic pain disorder, and it is extremely difficult to treat it adequately. This trial aims to assess the effectiveness of gabapentin (GBP) and pregabalin (PGB) in treating sciatic pain.

**Objective:** To evaluate and compare the effectiveness of pregabalin (PGB) and gabapentin (GBP) in treating persistent sciatica.

**Materials and methods:** The study design was a prospective, double-blind, single-center, double-dummy randomized, cross-over in patients with chronic sciatica. The study was conducted at the Department of Neurology Bolan Medical Complex Hospital, Quetta. The study included 67 participants to explore the efficacy of GBP and PGB in sciatic pain. The Quebec Back Pain Scale and VAS were used to measure the efficacy of gabapentin (GBP) and pregabalin (PGB) in treating chronic sciatica adverse events, concurrent drug profiles, and demographic factors were evaluated.

**Results:** In this randomized control trial (n = 67), there was a significant improvement in functionality (GBP: Quebec Back Pain Scale 60.61 to 35.21, p <.003; PGB: Quebec Back Pain Scale 60.64 to 37.03, p <.001) and a significant reduction in pain (GBP: VAS 7.77 to 3.22, p <.012; PGB: VAS 7.82 to 3.46, p <.012). Gabapentin was found to be more effective (VAS difference: 3.22 vs. 3.46, p =.003; improvement on the Quebec Back Pain Scale: 35.21 vs. 37.03, p =.017). Adverse effects ranged; gabapentin showed increased vertigo/dizziness (9.68% vs. 6.45%) and pregabalin showed higher drowsiness (79.03% vs. 27.42%)

**Conclusion:** For persistent sciatica, gabapentin is a better option because it works better at reducing pain intensity. These results offer clinicians useful information for customizing neuropathic pain management approaches.

**Keywords:** Adverse events, Chronic sciatica, Functional improvement, Gabapentin, Pain reduction, Pregabalin, Randomized trial

## INTRODUCTION

Millions of people worldwide are afflicted with chronic sciatica, a common painful condition characterized by continuous pain along the sciatic nerve. It may also involve itching, numbness, and tingling of one leg or both legs caused by compression or injury to the sciatic nerve (1-3). The pain may be sharp or dull, tingling or burning. Sciatic patients are usually treated by general practitioners, but a small percentage of patients are referred to secondary care before they can go under surgery (4-6). In a vast majority of cases (Approximately 90%), sciatica is caused by a herniated disc that puts pressure on one or more nerve roots, however, lumbar stenosis and tumors may also cause sciatica (7). Chronic sciatica is one of the most pervasive and persistent types of chronic low back pain that has been defined as continuous pain lasting for three months, even after the initial injury or the underlying cause of acute low back pain has been treated (5). Chronic sciatica is linked to high morbidity, which lowers quality of life, impairs physical function, and requires an enormous amount of healthcare resources. According to numerous scientific studies, the prevalence of sciatica is estimated to range from 14-45% in the common public (8) it is likely between 5% and 10% of the population in France (9). In 2007, remarkably 16.4% of the population in sub-Saharan Africa, especially in Nigeria, was found to have suffered from sciatica (10). A study conducted in 2007 in Sargodha, Pakistan revealed a shocking 26% prevalence rate of sciatica among the local population. This research



illustrated the sheer volume of people suffering from this condition and the need for improved treatments (11). Effective treatment for chronic sciatica is still a challenge, despite its high prevalence and impact. The best efficacious pharmacological therapy is yet unknown, however, the first-line treatment consists of a mix of neuropathic medicines and mild analgesics. Simple analgesics include paracetamol, NSAIDs and codeine(12, 13). A neuropathic agent is required to treat more severe neuropathic conditions. Anticonvulsants are effective at treating sciatica, in recent years, new AEDs have become available that have been used in treating neuropathic pain. These include Gabapentin and Pregabalin (14-16). The best available evidence suggests that both PGB and GBP are effective in reducing pain and improving function and quality of life (QOL) in patients with CS (17-19). However, this is not sufficient to justify their widespread prescription as most patients with CS will be treated with only one drug at any given time. Moreover, there are no data on long-term outcomes following treatment with PGB or GBP alone. The choice of both GBP and PGB to treat CS is currently in a position of equipoise. While some physicians believe that GBP is superior, others believe that PGB is the better option. Several studies suggest that both GBP and PGB are equally effective in the treatment of CS. However, several studies suggest that one drug is superior to the other. The most recent evidence suggests that each drug has its unique advantages and disadvantages when used alone or combined with other medications in the treatment of CS. The current study is a prospective randomized clinical trial to compare the efficacy of PGB and GBP in patients with CS. The primary purpose of this study was to determine whether PGB and GBP were equally effective for treating CS pain, compared to each other, and if there were adverse events associated with either treatment regimen. In addition, the study aimed to evaluate the frequency and severity of AEs associated with PGB-GBP interchange.

## MATERIALS AND METHODS

The study design was a prospective, double-blind, single-center, double-dummy randomized, crossover in patients with chronic sciatica. The study was conducted at the Department of Neurology Bolan Medical Complex Hospital, Quetta, and all participants gave written informed consent before participating in the study. The trial was conducted by the Standard Protocol for Clinical Trials in Human Subjects of the Food and Drug Administration (FDA) and NIH(20). The study was approved by the ethics committee of the Post Graduate Medical Institute (PGMIQ), Quetta. Both participants and researchers received a detailed explanation of the double-blind, crossover design in order to maximize clarity and reduce confusion. This included explaining the crossover design's reasoning as well as the order in which the treatments were administered.

To ensure that the results of this study are not biased by any company's involvement in drug supply, trial conduct, or manuscript review, we have decided not to include any drug company in this study.

## INCLUSION AND ELIGIBILITY

The inclusion for the trial included patients with unilateral CS who visited a specialized neurology OPD in a large teaching hospital. Chronic sciatica is pain lasting for three or more months and localized to one leg. Additionally, patients without a history of GBP or PGB and those who were at least 18 years old were included. Exclusion criteria include Pregnant ladies, lactating mothers, folic acid deficiency, B12 Deficiency, inherited neuropathies, cancer, amyloidosis, dementia, disease with altered mental status, and allergy to PGB and GPN. Patients with deranged urea and creatinine were also excluded as PGB and GPN are excreted through the kidneys. Exclusion criteria were chosen with care and supported by evidence to guarantee the accuracy of the study's conclusions.

## RANDOMIZATION & BLINDING

A simple randomization procedure was used in this trial. The patients were divided into two groups named Group A and Group B. We recruited chronic sciatica patients using simple randomization; Randomization is achieved through the use of a coin-flipping method, which is a simple but reliable way to generate the desired randomization effect. Trial medication is packed in a blank color gelatin shell capsule



by the trial pharmacist to maintain the randomization. According to a carefully designed 2 × 2 sequential study protocol, the treatment allocated to participants was administered in a double-blinded fashion with PGB being administered first followed by GBP subsequently. This method of allocation ensured that potential bias and confounding effects were minimized, allowing for accurate results. Due to the differing dosage frequencies between the two medications PGB, which is taken twice daily, and GBP, which is taken thrice daily, Medication packs for the PGB arm had to incorporate a placebo as the lunchtime dose so that they were indistinguishable from each other. This was important to ensure uniformity of treatment, and that both drug regimens were administered with equal efficacy.

## TRAIL REGIMEN AND PROCEDURE

Before the commencement of the study, participants were randomly assigned to receive either PGB or GBP as their initial treatment. Due to the crossover design of this study, participants had the rare chance to experience both treatments in succession, which was a unique opportunity for the study and PGB users. At the end of each intervention, subjects were assigned to receive the next treatment. The stringent one-week washout period was designed to ensure that any medium- or long-term carryover effects were highly unlikely, as the study was designed to account for any potential residual effects from previous treatments. The initial recommended dosage of PGB was 75mg taken once daily during the first week. Then titrated up to the maximum dosage of 150 mg depending upon the tolerance and side effects on each level. The effects of this dosage were seen to be mild and manageable. However, some people had a more difficult time with the higher dose levels than others. The starting dose of GBP was 100mg twice a day titrated up to maximum dosage 300mg daily in three different timings. The Australian and British Pharmacopeia each recommended higher doses for PGB and GBP, but as our local population has a low body mass index, we administered low doses to avoid side effects. The standard study dosing regimen consists of a 4-week titration period, followed by 4 weeks of maximum tolerated dose maintenance before the study medication was stopped for washout. In addition, a washout period of one week away from the medications was implemented between treatment phases to avoid any carry-over effects. All patients were required to maintain the same medication regimen throughout the study. For each drug, the maximum treatment period was eight weeks. It is difficult to bind participants to not take concomitant medications for the duration of the study due to the pain, so participants were allowed to continue concomitant drugs (including analgesics) throughout the study. While participants do not take drugs that were prohibited due to interaction with trial drugs. Throughout the trial, treatment compliance and adherence were continuously observed. To facilitate accurate assessment of participant engagement with the intervention, specifics of monitoring protocols, such as medication diaries and routine follow-up assessments, were provided.

## OUTCOMES

The primary outcome is the mean change in leg pain intensity for each individual on the VAS score during treatment. The VAS is a standardized pain scale used to measure the intensity of pain. It uses a 0-3 scoring system from 0=no pain, 1=mild pain, 2=moderate pain, and 3 severe pain. This was measured at baseline (week 0) and weeks 4, 8, 10, 14 and 18.

The key secondary outcome is the Quebec Back Pain Scale Questionnaire, measured at baseline and at weeks 4, 8, 10, 14, and 18 to assess disability. This scale measures the intensity of back pain and its impact on daily activities. It also includes questions about the patient's ability to perform certain activities. The tertiary outcome of this study was the collection of adverse events from participants. These adverse events were collected at baseline and weeks 4, 8, 10, 14 and 18. The adverse events data collected in the study were scored from 0 to 10, whereby an increasing number denotes a higher frequency or severity.

## DATA COLLECTION

The data collection method used in this study was the telephone, data was collected by the research team through telephone at each interval. Week 10 data collection served as the crossover secondary baseline for analysis. The study medication diary was used to identify missing doses, incorrect or inconsistent

dosing, and adverse reactions to study medications. The medication adherence rate for the study population was determined by counting the returned medicine. Inter-rater dependability amongst data collectors was ensured through the implementation of methods aimed at maintaining consistency and reliability in data collecting. This involved constant evaluation of data-gathering methods and training protocols.

## DATA ANALYSIS

Data were analyzed through SPSS version 23. The pre-and post-treatment measurements within each group were analyzed using paired-sample t-tests, and a more detailed comparison between the GBP and PGB groups was made using an independent-sample t-test. To assess the frequency of adverse events, the chi-square test was applied, which helped to provide a thorough knowledge of safety profiles. 0.05 was used as the predefined significance level.

## RESULTS

The study involved the random assignment of 67 participants over two years, and significant improvements in pain levels and functional abilities were noted in these individuals. Five patients have been excluded from the study to guarantee the accuracy of the results. To provide a thorough assessment of the various treatment modalities, the cohort was further split into two groups: one group received a sequence of PGB followed by GBP, and the other group received GBP followed by PGB. After the randomization procedure, three participants were dropped for various reasons, including missing follow-up appointments and not taking study medicine as prescribed. Furthermore, two subjects were randomized to the GBP-then-PGB order. Notably, every individual took the advised dosage of medication to the maximum. While there were minor differences between the two groups, the results indicated that both treatment modalities helped lower pain levels and enhance functional capacities. In comparison, the group that received GBP followed by PGB, and the group that received GBP followed by PGB reported somewhat greater improvements in pain levels. Still, overall improvements were significant for both groups, suggesting that both treatment sequences are sensible options for pain management and enhancing patients' functional abilities.

Throughout the study, the primary and secondary outcome measures were precisely defined and methodically assessed. The mean change in leg pain intensity on the Visual Analog Scale (VAS) was measured at several time points for the primary outcome measure. Evaluations were also conducted on secondary outcome measures, such as disability as determined by the Quebec Back Pain Scale Questionnaire. Missing data were handled transparently in the analysis to ensure the integrity of the findings.

## DEMOGRAPHICS

The study involved 62 individuals who had long-term sciatica and were, on average, 57 years old (SD 13.96). Of the study population, 33 members 53.2% were smokers. Gender breakdown showed almost equal participation, with 28 female participants (45.2%) and 34 male participants (54.8%). These results are presented in Table I.

**Table I.** Demographic and clinical characteristics of the study population (n=62)

Characteristic	Total population (n=62)
Age (mean $\pm$ SD), years	57 $\pm$ 13.96
Male	34 (54.8%)
Female	28 (45.2%)
Smoking	33 (53.2%)
Efficacy	62 (100%)

## CONCOMITANT DRUGS PROFILE

The study's treatment approach placed a strong emphasis on the complementary drugs' significance in the entire medication plan. More specifically, nonsteroidal anti-inflammatory medications (NSAIDs) were prescribed to 32.3% (n=20) of participants, while opioids were provided to 21.0% (n=13) of them.



## GABAPENTIN (GBP) AND PREGABALIN (PGB) EFFICACY

When assessing the effectiveness of Pregabalin (PGB), the results show a statistically significant decrease in pain intensity as determined by the Visual Analog Scale (VAS). The original mean (Mean  $\pm$  SD) VAS score of (7.82 $\pm$ .878)  $p < .001$  significantly dropped to (3.46 $\pm$ .970)  $p < .012$ , demonstrating the significant effect of Pregabalin in reducing pain related to long-term sciatica. Furthermore, a concomitant assessment with the Quebec Back Pain Scale demonstrated a significant improvement, with a decrease from 60.64,  $\pm$  SD 4.8,  $p < .0001$  to 37.03  $\pm$  SD 4.14,  $p < .001$ . This dual assessment, which includes both standardized and subjective assessments, offers a thorough grasp of Pregabalin's effectiveness in reducing the numerous symptoms of chronic sciatic pain.

In terms of Gabapentin's (GBP) effectiveness, the data show a similar and more significant decrease in pain severity, which is consistent with Pregabalin's results. There has been a noticeable improvement as seen by the statistically significant drop in VAS scores from (Mean  $\pm$  SD) 7.77,  $\pm 1.03$ ,  $p < .002$  to 3.22  $\pm$  SD .930,  $p < .012$ . Gabapentin's effectiveness is further supported by the Quebec Back Pain Scale examination, which shows a significant drop from 60.61  $\pm$  SD 10.73,  $p < .0001$  to 35.21  $\pm$  SD 2.77,  $p < .0003$ . The consistent improvement across different pain evaluation instruments in this trial indicates that Gabapentin is an effective treatment for the complicated symptoms associated with long-term sciatica (Table II).

**Table II.** Efficacy measures for PGB, GBP

Efficacy Measure	PGB (Mean $\pm$ SD)	<i>p</i> value
VAS Start	7.82 (.8782)	<.001
VAS Finish	3.46 (.970)	<.012
Quebec Back Pain Scale Start	60.64 (4.81)	<.0001
Quebec Back Pain Scale Finish	37.03 (4.14)	<.001
<b>GBP (Mean <math>\pm</math> SD)</b>		
VAS Start	7.74 (1.03)	<.002
VAS Finish	3.22 (.930)	<.012
Quebec Back Pain Scale Start	60.61 (10.73)	<.001
Quebec Back Pain Scale Finish	35.21 (2.77)	<.003

\* Gabapentin's (GBP); Pregabalin (PGB)

## HEAD-TO-HEAD COMPARISON

The minute variations in efficacious outcomes were revealed by a careful analysis of the head-to-head comparison between gabapentin and pregabalin. Significantly, the minimal VAS difference between the Gabapentin group (3.22) and the Pregabalin group (3.46) suggested that Gabapentin may provide a better means of reducing pain intensity. In the same way, the difference in the Quebec Back Pain Scale between the Gabapentin and Pregabalin groups showed a positive trend (35.21 against 37.03). These subtle variations highlight the unique therapeutic effects of pregabalin and gabapentin, indicating that Gabapentin may have a more notable effectiveness profile in the treatment of chronic sciatica.

The comprehensive analysis of the relative benefits of gabapentin and pregabalin for chronic sciatica identifies minute distinctions between the two medications that should be taken into account when making clinical decisions. Gabapentin is a more effective intervention for the treatment of chronic sciatica than Pregabalin, as seen by the greater reductions in the Quebec Back Pain Scale and VAS seen in the Gabapentin group. These results make a substantial contribution to the growing body of knowledge in both the clinical and academic domains about neuropathic pain management (Table III).

**Table III.** Head-to-Head Comparison

Variables	Difference (PGB vs GBP)	<i>p</i> value
VAS	3.46 vs 3.22 (.930)	.003
Quebec Back Pain Scale	37.03 vs 35.21	.017

## ADVERSE EFFECTS

Pregabalin (PGB) and gabapentin (GBP) showed distinct profiles in the comprehensive assessment of side effects, necessitating further research to pinpoint the minute variations in their tolerance and safety.

## ADVERSE EVENTS OF PREGABALIN (PGB)

Among the study participants, pregabalin medication was linked to several unusual adverse events. Particularly, 17.74% of respondents reported having headaches, nausea, or vomiting, which is suggestive of Pregabalin's effects on the central nervous system and gastrointestinal tract. Further, 19.35% of people had a noticeable bowel disruption, highlighting the medication's possible impact on gastrointestinal function. Significantly, 79.03% of individuals reported feeling sleepy or drowsy, indicating a significant effect on the central nervous system. These results emphasize the need for a careful risk-benefit analysis, especially in patients who are susceptible to gastrointestinal and sedation-related side effects when considering Pregabalin for persistent sciatica.

## ADVERSE EVENTS OF GABAPENTIN (GBP)

Due to the unique profile of adverse events associated with Gabapentin use, caution is required. One prominent adverse effect affecting the central nervous system was drowsiness or somnolence, which was recorded in 27.42% of patients. Dizziness or vertigo, which affected 9.68% of the subjects, further highlighted the possible neurological side effects linked to gabapentin. With 14.52% of cases reporting nausea, vomiting, and headaches, it appears that gastrointestinal and central nervous system side effects are rather common. Even while these side effects are usually well-tolerated, they highlight the significance of customized risk assessment and monitoring, especially for individuals who are more susceptible to neurological sensitivity or sedation-related side effects.

## ADVERSE EVENT COMPARISON

Comparing Pregabalin and Gabapentin side effects side by side reveals different safety profiles. Compared to gabapentin (27.42%), pregabalin showed a higher prevalence of drowsiness or sedation (79.03%). On the other hand, gabapentin showed a greater frequency of vertigo or dizziness (9.68%) in contrast to pregabalin. Remarkably, both groups experienced headaches, nausea, and vomiting at varying frequencies. This thorough research offers insightful information to physicians who want to customize neuropathic pain management techniques to fit the unique needs of their patients (Table IV).

**Table IV.** Prevalence of Adverse Events

Adverse Event	Pregabalin (no. %)	Gabapentin (no. %)
Nausea, vomiting, headache	11 (17.74%)	9 (14.52%)
Bowel disturbance	12 (19.35%)	2 (3.23%)
Diplopia, dysarthria	5 (8.06%)	-
Dizziness, vertigo	4 (6.45%)	6 (9.68%)
Drowsy, sedation	49 (79.03%)	17 (27.42%)
Xerostomia	2 (3.23%)	-
Weight gain	5 (8.06%)	-
Ataxia	-	4 (6.45%)
Dry Mouth	9 (14.52%)	9 (14.52%)

## DISCUSSION

This trial compared the effects of gabapentin (GBP) and pregabalin (PGB) on pain intensity in patients with chronic sciatica. Over the duration of 6-months period, 67 participants were randomly assigned, and key demographic data such as age, gender, and smoking habits were collected. Significant improvements were noted in pain levels and functional abilities. The cohort was split into two groups and given different sequences of PGB and GBP. In contrast to pregabalin, Gabapentin showed a marginally higher reduction in pain intensity. These results imply that Gabapentin might be a better choice for those who need more potent pain treatment.

The trial's validity is strengthened by its prospective, double-blind, crossover design that complies with FDA and NIH requirements. The study's internal validity is improved by the meticulous blinding and randomization processes, which included the use of a double-dummy technique to reduce bias and confounding effects.

Based on the results of the Quebec Back Pain Scale and the Visual Analog Scale (VAS), both pregabalin and gabapentin showed a considerable reduction in pain intensity. Gabapentin demonstrated a marginally higher reduction in pain intensity (VAS difference: GBP 3.22 vs. PGB 3.46) in the head-to-head comparison, indicating a possible benefit in the treatment of chronic sciatica. Our research was contextualized by Tatit, Rafael et.al study on chronic low back pain without nerve injury. In the particular case of chronic sciatica, our results showed significant reductions in pain intensity for both GBP and PGB, despite their findings suggesting a little decreased efficacy for PGB (21). In contrast to the multi-trial study by María Soledad Giménez-Campos et al. Giménez-Campos highlights the ineffectiveness of PGB and GBP in managing sciatica pain, which demands a critical analysis of the inconsistent findings. Conversely, our research highlights the complex nature of neuropathic pain responses to these drugs and implies that GBP and PGB are viable alternatives for treating chronic sciatica (22). Our findings in the setting of chronic sciatica are consistent with Robertson's thorough study, which demonstrated similar efficacy and safety profiles for GBP and PGB. Our work supports the claim that strong evidence-based guidelines are necessary, and the emphasis on the few and weak data highlights the need for direct "head-to-head" investigations even more (23). Our observations and the results of Mathieson's study differ. Our results showed considerable improvements with both GBP and PGB, but their investigation did not find a significant reduction in the degree of leg discomfort. These differences demonstrate the intricacy of pain syndromes and the possible impact of environmental variables (24). Baron's assessment of pregabalin in chronic lumbosacral radiculopathy advances our knowledge of neuropathic pain even if it is not directly related to our focus on chronic sciatica. Our work emphasizes the variable reactions across different pain conditions and contributes to the expanding body of evidence by aligning with the efficacy of GBP and PGB (25).

Pregabalin and gabapentin have notable adverse event profiles that differ from one another. Sedation was more common with pregabalin (79.03%), highlighting the importance of a careful risk-benefit assessment, especially in individuals who are susceptible to central nervous system effects. Conversely, gabapentin demonstrated a greater incidence of vertigo or light-headedness (9.68%). Although Robertson et.al reported fewer side effects from gabapentin, our research found different adverse event profiles, such as increased sedation from pregabalin and increased vertigo/dizziness from gabapentin (23). The interaction of patient responses, dosage adjustments, and methodological variances highlights the necessity of making complex treatment decisions for long-term sciatica.

This trial has significantly advanced our understanding of how to manage persistent sciatica, a condition that affects millions of individuals globally. The results provide new insights into possible therapy modalities and strategies that may help reduce symptoms and enhance the quality of life for individuals with this illness. To manage and treat sciatica as effectively as possible, this data can be extremely helpful to patients, researchers, and healthcare providers.

Moving on to possible drawbacks, a few things are important to take into account. Although the study's sample size was enough for the intended research, it might have limited how broadly the findings can be applied to other populations. Furthermore, the results that were obtained might have been affected by confounding variables or selection bias. Recognizing these constraints is necessary in order to offer a fair analysis of the study's findings impacts of the study's findings are notable, despite these limitations. Given the prevalence of chronic sciatica and its impact on patients' quality of life, finding appropriate therapies is crucial. This study adds significant knowledge to clinical practice by clarifying the effectiveness of pregabalin and gabapentin in treating pain and disability related to chronic sciatica. Physicians can make the best possible treatment decisions and patient care by using this evidence.

## CONCLUSION

To sum up, our study on the safety, as well as efficacy of pregabalin (PGB) and gabapentin (GBP) for chronic sciatica, demonstrates these medications' remarkable ability to reduce the intensity of pain and enhance functional abilities. Interestingly, gabapentin turns out to be a better option than pregabalin,

demonstrating greater reductions in pain intensity and confirming its effectiveness in the complex world of chronic sciatica.

These results present both drugs as beneficial choices for physicians managing the intricacies of neuropathic pain linked to long-term sciatica. Relevant studies' comparative analyses highlight the effectiveness of GBP and PGB in different contexts, and our research offers crucial information to support customized neuropathic pain therapy. To improve clinical outcomes, future research endeavors should focus on investigating alternative treatment techniques, optimizing dose regimes, and delving deeper into the underlying processes of chronic sciatica.

### Limitations:

We acknowledge that research methods, patient demographics, and conditions vary, which presents certain limits to our study. Although lengthy enough for the main results, the study's duration might not have captured longer-term impacts. Future studies should examine the specifics of GBP and PGB use in various pain disorders, acknowledging the significance of condition-specific therapy strategies. Head-to-head research is still an important way to develop more detailed evidence-based recommendations for the treatment of chronic sciatica.

### Conflict of Interest:

The authors have no conflict of interest.

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