

RETROSPECTIVE ANALYSIS OF PATIENTS PRESCRIBED PREGABALIN AND GABAPENTIN IN PHYSICAL MEDICINE, REHABILITATION AND RHEUMATOLOGY OUTPATIENT CLINICS

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Fiziksel Tıp, Rehabilitasyon ve Romatoloji Polikliniklerinde Pregabalin ve Gabapentin Reçete Edilen Hastaların Retrospektif Analizi

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ABSTRACT

Objective: This study aims to investigate the use of gabapentinoids (gabapentin and pregabalin) in the management of pain in musculoskeletal diseases by evaluating the demographic characteristics, comorbidities and reasons for prescribing these drugs.

Material and Methods: Between January 2023 and July 2024, 614 patients aged ≥18 years who applied to Erciyes University Faculty of Medicine - Physical Medicine and Rehabilitation and Rheumatology outpatient clinic and received gabapentinoid treatment were retrospectively analyzed. Demographic characteristics, comorbidities, laboratory values [C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), blood urea nitrogen (BUN), estimated glomerular filtration rate (eGFR), and creatinine], doses of gabapentinoid drugs, and reasons for prescription were obtained from the patient record system.

Results: The mean age of the patients included in the study was 59.8±12.6 years and 78.2% were female. The most common comorbidities in all patients were hypertension (51.3%), rheumatological diseases (36.5%) and diabetes mellitus (30.3%), respectively. The most common rheumatological diseases were rheumatoid arthritis (40.6%) and spondyloarthritis (39.3%). The rate of rheumatological comorbidity was statistically significantly higher in the pregabalin group (60.5%) compared to the gabapentin group (32.8%) (p<0.001). Gabapentin was most commonly prescribed for chronic pain (68.1%) and pregabalin for fibromyalgia (55.6%).

Conclusion: In this study, pregabalin was more commonly prescribed for patients with rheumatologic comorbidities and fibromyalgia, whereas gabapentin was more frequently used in older patients and those with cardiovascular risk factors. These observational findings suggest that prescribing patterns differ according to comorbidity profiles and clinical context.

Keywords: Pregabalin; Gabapentin; Pain; Neuropathic Pain; Fibromyalgia; Rheumatologic Diseases

ÖZET

Amaç: Bu çalışmada, gabapentinoidlerin (gabapentin ve pregabalin) kas-iskelet sistemini tutan hastalıklarda ağrı yönetimindeki kullanımını incelemek, hastaların demografik özelliklerini, komorbiditelerini ve bu ilaçların reçete edilme nedenlerini değerlendirmek amaçlanmıştır.

Gereç ve Yöntemler: Ocak 2023 ile Temmuz 2024 tarihleri arasında Erciyes Üniversitesi Tıp Fakültesi-Fiziksel Tıp ve Rehabilitasyon ile Romatoloji polikliniklerine başvuran ve gabapentinoid tedavisi alan 18 yaş üzeri 614 hasta retrospektif olarak incelendi. Hastaların demografik özellikleri, komorbiditeleri, laboratuvar değerleri (C-reaktif protein (CRP), eritrosit sedimentasyon hızı (ESR), kan üre azotu (BUN), tahmini glomerüler filtrasyon hızı (eGFR), kreatinin), gabapentinoid ilaçların dozları ve reçete edilme nedenleri hasta kayıt sisteminde elde edildi.

Bulgular: Çalışmaya dahil edilen hastaların ortalama yaşı 59,8±12,6 yıl olup, %78,2'si kadın hastalardan oluşmaktaydı. Tüm hastalarda en sık rastlanan komorbiditeler sırasıyla hipertansiyon (%51,3), romatolojik hastalıklar (%36,5) ve diyabetes mellitus (%30,3) olarak tespit edildi. En sık görülen romatolojik hastalıklar romatoid artrit (%40,6) ve spondiloartritler (%39,3) idi. Pregabalin grubunda romatolojik hastalık görülme oranı (%60,5), gabapentin grubuna (%32,8) kıyasla istatistiksel olarak anlamlı derecede daha yüksek bulundu (p<0,001). Gabapentin en sık kronik ağrı (%68,1), pregabalin ise fibromiyalji (%55,6) için reçete edilmiştir.

Sonuç: Bu çalışmada, pregabalin romatolojik komorbiditeleri ve fibromiyalji olan hastalarda daha sık reçete edilirken; gabapentin ise ileri yaştaki ve kardiyovasküler risk faktörleri bulunan hastalarda daha yaygın olarak kullanılmıştır. Bu gözlemsel bulgular, reçeteleme örüntülerinin komorbidite profilleri ve klinik bağlama göre değiştiğini göstermektedir.

Anahtar Kelimeler: Pregabalin; Gabapentin; Ağrı; Nöropatik Ağrı; Fibromiyalji; Romatolojik Hastalıklar



INTRODUCTION

According to the International Association for the Study of Pain (IASP), pain is defined as “a sensory and emotional experience associated with actual or potential tissue damage, highlighting its intricate and multidimensional characteristics” (1). Whereas acute pain has a protective role, chronic pain is a condition that typically persists beyond the removal of noxious stimuli and, in most instances, is considered a maladaptive response (2). In the pathogenesis of pain, three fundamental mechanisms have been identified. Nociceptive pain arises from the somatosensory system's response to noxious stimuli, such as injury or inflammation. Neuropathic pain occurs as a result of damage to the nervous system, and nociplastic pain results from changes in pain modulation within the nervous system in the absence of either nociceptor activation or peripheral tissue damage (3-5).

In rheumatological diseases, recurrent joint and systemic inflammation result in peripheral tissue damage, driven by elevated levels of proinflammatory cytokines such as tumor necrosis factor (TNF) and interleukin-6 (IL-6), which contribute to both acute and chronic pain (6-8). Inflammatory mediators enhance neuroinflammatory cycles and central sensitization by raising nociceptor sensitivity (9-11). The mechanisms important for enhanced pain perception in both the peripheral and central nervous systems also include transient receptor potential channels and kinase-mediated mechanisms (12-14). Moreover, disorders such as fibromyalgia, often comorbid with rheumatic diseases, further stress the role of nociplastic pain in the management of these disease entities. Hence, due to their complexity, in rheumatology diseases, multidisciplinary strategies should be implemented in clinical practice along with the practice of biological therapies to control and manage the pain ailment (15,16).

Gabapentinoid drugs, which include gabapentin and pregabalin, were originally developed for treating epilepsy but are now widely used in the treatment of neuropathic pain. Gabapentinoids reduce nociceptive transmission and alleviate pain transmission by inhibiting the alpha-2-delta subunit of voltage-gated calcium channels and activating descending noradrenergic pain inhibitory pathways (17). The

most frequent side effects include sedation, vertigo, cognitive dysfunction, instability, and gait disturbance. These side effects present a significant challenge to clinical management, particularly in elderly patients, by increasing the risk of falls (18,19). Several reports have suggested that gabapentinoids are being prescribed quite commonly not only for neuropathic pain but also for musculoskeletal diseases and nervous system disorders along with diabetes-related conditions (20). Previous studies conducted in Türkiye have provided important data on the prevalence of neuropathic pain and the use of gabapentinoids (21,22). However, studies evaluating gabapentinoid prescribing patterns in rheumatology and physical medicine and rehabilitation outpatient clinics are limited. Therefore, our study contributes to the existing literature by providing a local perspective

The present study examines the characteristics of patients using gabapentinoids for musculoskeletal disorders and neuropathic pain provides an in-depth description of their prescription patterns.

MATERIAL AND METHOD

Patients aged 18 years and older that visited the Physical Medicine and Rehabilitation (PMR) and Rheumatology outpatient clinics of Erciyes University Faculty of Medicine between January 2023 and July 2024 and were prescribed medications containing gabapentin or pregabalin were included in this study. Patients were selected regardless of gender. Laboratory and clinical data of the patients were collected from the electronic medical record system of hospital. Patients with incomplete demographic, clinical, or laboratory data and those prescribed gabapentin or pregabalin for non-pain indications (such as epilepsy or generalized anxiety disorder) were excluded. For patients with multiple visits, only the data from the last admission were included in the analysis.

Age, gender, height, weight, body mass index (BMI), existing rheumatological diseases, and other concomitant conditions were recorded. Additionally, detailed information was documented regarding all medications prescribed, the active ingredient of gabapentinoids, the diagnoses for which these drugs were prescribed, their duration of use, and doses. The values regarding erythrocyte sedimentation rate

(ESR), C-reactive protein (CRP), blood urea nitrogen, creatinine, and estimated glomerular filtration rate [eGFR, calculated using the Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) formula] were also measured routinely during the admissions to our clinic and were investigated within the context of the study. The study protocol was applied according to the principles of the Declaration of Helsinki and approved by the Ethics Committee of Erciyes University Faculty of Medicine Hospital (approval no: 2024/150).

In the present study, all data analyses were conducted using IBM Statistical Package for the Social Sciences (SPSS) 23.0 software. Descriptive statistics are presented as median, interquartile range, mean, standard deviation, minimum, maximum, frequency, and percentage values. The normality of continuous variables was assessed using the Shapiro-Wilk test. Depending on the distribution, numerical data were compared using the Student's t-test for normally distributed variables or the Mann-Whitney U test for non-normally distributed variables, whereas categorical data were analyzed using the chi-square test between patient groups. In all analyses, a p-value of less than 0.05 was accepted as statistically significant.

RESULTS

A total of 614 patients were included in this study. The mean age of the patients was 59.8 ± 12.6 years, and 78.2% of the cohort were female. Women predominated in both groups, with 84.0% in the pregabalin group and 77.3% in the gabapentin group. However, this difference was not statistically significant ($p=0.228$).

The most common rheumatological diseases among participants were rheumatoid arthritis (40.6%), spondyloarthritis (39.3%), and Sjogren's syndrome (13.8%). The rate of rheumatological comorbidities was significantly higher in the pregabalin group (60.5%) compared to the gabapentin group (32.8%) ($p<0.001$). The most frequent comorbidities among all patients were hypertension (51.3%) and diabetes mellitus (30.3%). Other common conditions were dyslipidemia (23.1%), pulmonary diseases (20.8%), coronary artery disease (22.1%), and fibromyalgia (14.8%). Hypertension (53.5% vs. 37.0%, $p=0.006$), dyslipidemia

(25.1% vs. 9.9%, $p=0.004$), and coronary artery disease (24.0% vs. 9.9%, $p=0.007$) reported more frequently in the gabapentin group than in the pregabalin group. In contrast, the prevalence of fibromyalgia was significantly higher in the pregabalin group (55.6% vs. 8.6%, $p<0.001$).

The most common indications for gabapentinoid prescriptions were chronic pain (62.2%), neuropathic pain (23.3%), and fibromyalgia (14.5%). Among the chronic pain group, 23.6% of the patients were treated for chronic low back pain and 7.5% for chronic neck pain, while the remaining patients were classified under other types of chronic pain, such as generalized musculoskeletal pain or nonspecific chronic pain. While fibromyalgia was the most frequent indication in the pregabalin group (55.6%), chronic pain was more commonly reported in the gabapentin group (68.1%) ($p<0.001$). Neuropathic pain rates were similar between the two groups ($p=0.700$). Detailed information is presented in Table 1. Regarding drug dosages, the median pregabalin dose was 150 mg/day (interquartile range: 100-150 mg), whereas the median gabapentin dose was 900 mg/day (interquartile range: 600-900 mg). Among patients using gabapentin, 46% received a dose of ≤ 600 mg, 44.8% received a dose between 600-1200 mg, and 9.2% received a dose of ≥ 1200 mg. Among patients using pregabalin, 21% received a dose of ≤ 75 mg, 59.3% received a dose between 75-150 mg, and 19.8% received a dose of ≥ 150 mg (Figure 1 and Figure 2).

Finally, a total of 102 patients (16.6%) were prescribed gabapentinoids for pain related to diabetic polyneuropathy. The pregabalin group had significantly higher estimated glomerular filtration rate (eGFR) values [91.8 (75.1-105.2) mL/min/1.73m² vs. 87.8 (70.8-99.2) mL/min/1.73m²; $p=0.018$] and lower blood urea nitrogen (BUN) levels (13.1 (10.6-16.5) mg/dL vs. 15 (11.7-19) mg/dL; $p=0.006$) compared to the gabapentin group. No statistically significant differences were observed in C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), or creatinine levels between the two groups. Detailed findings are presented in Table 2.

Table 1. Demographic and clinical characteristics of the patients

Variables	All patients (n=614)	Pregabalin (n=81)	Gabapentin (n=533)	p value
Age, years	59.8±12.6	55.4±12.5	60.5±12.4	0.001 ^{a*}
Female sex, n (%)	480 (78.2)	68 (84.0)	412 (77.3)	0.228 ^b
Rheumatological comorbidities, n (%)				
Yes	224 (36.5)	49 (60.5)	175 (32.8)	<0.001 ^{b*}
RA, n (%)	91 (40.6)	14 (28.6)	77 (44.0)	0.075 ^b
SpA	88 (39.3)	23 (46.9)	65 (37.1)	0.282 ^b
SS	31 (13.8)	8 (16.3)	23 (13.1)	0.737 ^b
FMF	17 (7.6)	4 (8.2)	13 (7.4)	0.769 ^b
uCTD	16 (7.1)	5 (10.2)	11 (6.3)	0.352 ^b
SLE	10 (4.5)	2 (4.1)	8 (4.6)	1.000 ^b
BD	6 (2.7)	1 (2.0)	5 (2.9)	1.000 ^b
SSc	4 (1.8)	2 (4.1)	2 (1.1)	0.209 ^b
TA	3 (1.3)	1 (2.0)	2 (1.1)	0.525 ^b
Polymyalgia rheumatica	2 (0.9)	1 (2.0)	1 (0.6)	0.390 ^b
No	390 (63.5)	32 (39.5)	358 (67.2)	-
Other comorbidities, n (%)				
HT	315 (51.3)	30 (37.0)	285 (53.5)	0.006 ^{b*}
DM	186 (30.3)	21 (25.9)	165 (31.0)	0.359 ^b
Pulmonary disease	128 (20.8)	18 (22.2)	110 (20.6)	0.857 ^b
Dyslipidemia	142 (23.1)	8 (9.9)	134 (25.1)	0.004 ^{b*}
CAD	136 (22.1)	8 (9.9)	128 (24.0)	0.007 ^{b*}
Osteoporosis	107 (17.4)	11 (13.6)	96 (18.0)	0.411 ^b
FMS	91 (14.8)	45 (55.6)	46 (8.6)	<0.001 ^{b*}
CVD	38 (6.2)	3 (3.7)	35 (6.6)	0.458 ^b
CKD	35 (5.7)	3 (3.7)	32 (6.0)	0.606 ^b
Malignancy	34 (5.5)	6 (7.4)	28 (5.3)	0.433 ^b
Thyroid disorders	41 (6.7)	4 (4.9)	37 (6.9)	0.637 ^b
Indications, n (%)				
FMS	89 (14.5)	45 (55.6)	44 (8.3)	<0.001 ^{b*}
Neuropathic pain	143 (23.3)	17 (21.0)	126 (23.6)	0.700 ^b
Chronic pain	382 (62.2)	19 (23.5)	363 (68.1)	<0.001 ^{b*}

Data are presented as mean±standard deviation for age, and as number (percentage) for all other variables. a: Student's t-test; b: Chi-square test. * p<0.05

RA: Rheumatoid arthritis, SpA: Spondyloarthritis, SS: Sjogren's syndrome, SLE: Systemic lupus erythematosus, FMF: Familial Mediterranean fever, uCTD: Undifferentiated connective tissue disease, BD: Behcet's disease, SSc: Systemic sclerosis, TA: Takayasu arteritis, HT: Hypertension, DM: Diabetes mellitus, CAD: Coronary artery disease, FMS: Fibromyalgia syndrome, CKD: Chronic kidney disease, CVD: Cerebrovascular disease.

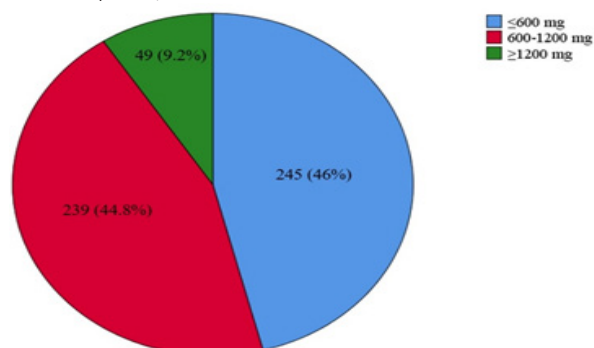


Figure 1. Daily dose distribution of gabapentin among patients

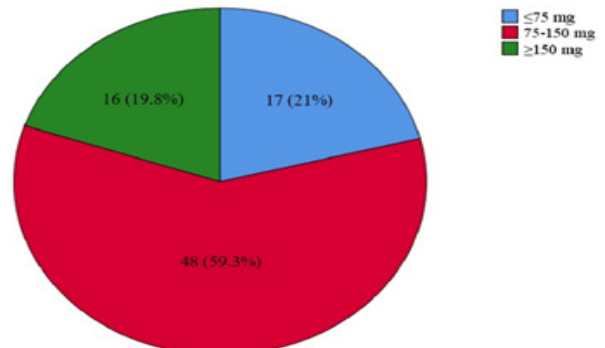


Figure 2. Daily dose distribution of pregabalin among patients

Table 2. Laboratory findings of the patients

Variables	All patients (n=614)	Pregabalin (n=81)	Gabapentin (n=533)	p value
CRP (mg/L)	2.4 (1.2-5.8)	2.5 (1.0-5.9)	2.4 (1.2-5.8)	0.829 ^a
ESR (mm/h)	15 (8.0-25)	16.5 (11-27)	15 (7.0-24)	0.280 ^a
eGFR (mL/min/1.73m ²)	88.4 (71.3-103)	91.8 (75.1-105.2)	87.8 (70.8-99.2)	0.018 ^a
BUN (mg/dL)	14.6 (11.5-18.5)	13.1 (10.6-16.5)	15 (11.7-19)	0.006 ^{**}
Creatinine (mg/dL)	0.8 (0.7-0.9)	0.7 (0.6-0.9)	0.8 (0.7-0.9)	0.076 ^a

Data are presented as median (min-max). a: Mann-Whitney U testi. * p<0.05

CRP: C-reactive protein, ESR: Erythrocyte sedimentation rate, eGFR: Estimated glomerular filtration rate, BUN: Blood urea nitrogen

DISCUSSION

This study demonstrated that gabapentinoid prescription patterns in PMR and Rheumatology outpatient clinics vary considerably depending on patient demographics, comorbidities, and clinical indications. These findings indicate that gabapentinoid use is not uniform across populations, underlining the importance of tailoring treatment to individual patient characteristics.

One of the main factors that can influence the prescribing patterns of gabapentinoids is patient's age. It was observed that patients who used pregabalin were significantly younger. Polypharmacy is common among elderly patients, who often have more than one concurrent medical problem. The pharmacokinetic profiles of gabapentin and pregabalin appear favorable, especially when considered for patients in the elderly population. Their advantages include limited drug-drug interactions, low plasma protein binding of less than 3%, a lack of hepatic metabolism, a half-life of 5-7 hours, and no requirement for routine clinical laboratory monitoring. However, both drugs share several well-documented adverse effects, including dizziness, drowsiness, and peripheral edema (23). Gabapentinoids are centrally acting drugs; their most common adverse effects, which may occur in up to 30% of cases, are sedation and dizziness (24). There is always a risk of drug accumulation and toxicity in elderly patients due to impaired renal function. Additionally, polypharmacy increases the risk of adverse effects (25,26). Gabapentin and pregabalin are pharmacodynamically similar drugs acting on the central nervous system. Pharmacokinetically, though similar, pregabalin demonstrates dose-dependent linear pharmacokinetics, whereas gabapentin does not (27).

The linear pharmacokinetic profile of pregabalin

may thereby be linked with an increased risk of drug accumulation and toxicity in elderly subjects. In contrast, gabapentin is considered to potentially have a safety advantage due to its limited increase in plasma concentrations after dose escalation (28). This characteristic underscores the preference for gabapentin, especially in elderly populations with impaired renal function and at higher risk of polypharmacy. In our study, gabapentin use was more common than pregabalin use among geriatric patients; however, this difference was not statistically significant. In addition to pharmacokinetic considerations, regulatory restrictions related to the potential risk of misuse have also contributed to the lower prescription rates of pregabalin compared to gabapentin, particularly in settings where pregabalin requires stricter prescription control (29).

The female population constituted 78.2% of the sample population. Although the proportion of women was higher in the pregabalin group than in the gabapentin group (84.0% vs. 77.3%), this difference was not statistically significant. This is consistent with many studies in the literature showing that fibromyalgia and other chronic pain syndromes are more common in women (30-32). The various mechanisms leading to such gender disparities are not yet fully understood.

The literature indicates that preclinical data supporting the hypothesis of increased pain sensitivity in women aligns with clinical reports. However, it is believed that there is a lower degree of gender differences in emotional and cognitive pain responses (33). The exact cause of the higher prevalence of chronic pain in females compared to males is not well understood. Contributing factors include higher rates of anxiety and depression, differing pain behaviors, inequalities in central nervous system inputs, and hormonal influences of the menstrual cycle (34).

Rheumatological comorbidities were present in 36.5%

of all patients, RA in 40.6%, and spondyloarthritis (SpA) in 39.3%. Rheumatological comorbidities were significantly higher in the pregabalin group at 60.5% compared with the gabapentin group at 32.8%. This indicates that pregabalin was more favored in the management of cases causing chronic pain in rheumatological disorders. More recent studies reported that 36-62 % of patients with autoimmune diseases had high rates of chronic overlapping pain conditions, which indicates a critical role of pain management in such populations (15).

Pain is one of the most common symptoms in rheumatic diseases and involves both peripheral and central mechanisms. Acute inflammation predominantly promotes nociceptive pain, whereas chronic inflammation leads to central sensitization and the gradual development of nociplastic pain (11,35). While treatment of inflammation can reduce the nociceptive component of pain, management of chronic pain requires addressing central sensitization as well (15). Inadequate characterization of pain phenotypes may lead rheumatologists to attribute pain solely to peripheral inflammation and thus develop suboptimal treatment strategies (36). Understanding these mechanisms is clinically relevant, as gabapentinoids can modulate central sensitization and may provide additional benefit in patients in whom pain extends beyond peripheral inflammation.

In addition, systemic comorbidities such as hypertension (51.3%), diabetes mellitus (30.3%) and dyslipidemia (23.1%) were also found to be common. This may be related to the burden of comorbidity in the elderly population.

When comparing our findings with previous reports, some similarities and differences become apparent. In our cohort, the most common indications for gabapentinoid prescriptions were chronic pain (62.2%), neuropathic pain (23.3%), and fibromyalgia (14.5%). Pregabalin was most frequently prescribed for fibromyalgia (55.6%), whereas gabapentin was predominantly used for chronic pain (68.1%) and neuropathic pain (23.6%). The preference for pregabalin in fibromyalgia can be attributed to its United States Food and Drug Administration (FDA)-approved indication for this condition (37). In contrast, a study conducted in hospitalized PMR patients

reported that gabapentinoids were prescribed in approximately one-third of cases, with neuropathic pain being the predominant indication (close to 90%). In that study, pregabalin was commonly prescribed for fibromyalgia, neck and arm pain, and gonarthrosis, while gabapentin was more often used for diabetic neuropathy, paraplegia, and hemiplegia (18). Both studies, however, highlighted that gabapentinoids were frequently prescribed at lower-than-recommended doses. These differences may be explained by the distinct patient populations: while our study included outpatients followed in rheumatology and PMR clinics, the previous study focused on inpatients with more severe neurological conditions, which likely influenced the distribution of indications and prescribing preferences.

Medication dosage analyses revealed that half of the patients taking gabapentin and almost a quarter of those on pregabalin used than the recommended doses. According to the recent review on gabapentinoids, gabapentin is typically initiated at a daily dose of 300-600 mg, with the therapeutic target dose ranging from 1800 to 3600 mg per day, administered in divided doses. For pregabalin, the recommended starting dose is generally between 75 and 150 mg per day, with an effective therapeutic range of 150 to 600 mg per day. Both medications require gradual dose titration based on patient response and tolerability (36). Gabapentinoids have the potential for dependence, abuse, and withdrawal syndrome. This is particularly risky among patients with active or past substance use disorder apart from psychiatric co-morbidities. The potential risk of misuse and dependence is reported to be higher with pregabalin compared to gabapentin (38). Considering that pregabalin requires stricter prescription regulations and carries a higher abuse potential, these factors might have contributed to the more frequent prescription of gabapentin over pregabalin in clinical practice. And these factors may explain why gabapentinoids are often prescribed at low doses. The regional factors may be the significant factors that of gabapentin. Regional coverage, preferences for alternative treatments, and cultural perceptions of pain management may contribute to lower gabapentin dosing (39,40). In those regions where educational levels are quite low, misconceptions

regarding medication side effects may negatively affect adherence to treatment and dose titration. Hence, regional and socio-economic factors should be considered when analyzing differences in gabapentin dosing.

The differences regarding CRP, ESR, and creatinine levels were not statistically significant between the two groups. eGFR was higher and BUN values were lower in the pregabalin group compared to the gabapentin group. This suggests that such a difference may not have any impact on prescribing any of these two drugs. This study has several limitations. First, its retrospective and single-center design, as well as the inclusion of patients who had recently started treatment, may restrict the generalizability of the findings. Second, side effects related to gabapentinoid use were not reported, and patients' responses to the prescribed medications were not evaluated. Third, the imbalance between the pregabalin and gabapentin group sizes may have reduced the statistical power of subgroup analyses. In addition, only patients who were prescribed gabapentinoids at our center were included, while those who initiated treatment elsewhere were excluded, further limiting generalizability. Finally, the diagnoses of diabetic polyneuropathy or polyneuropathy were not confirmed by electromyography (EMG), which could have strengthened diagnostic accuracy. Future multicenter studies with larger and more balanced cohorts are needed to validate and expand these findings.

CONCLUSION

This study demonstrated that pregabalin was more frequently prescribed in patients with rheumatological comorbidities and fibromyalgia, while gabapentin was preferred in elderly patients and those with cardiovascular risk factors. Additionally, most patients were prescribed lower-than-recommended doses of both drugs. These findings highlight that gabapentinoid prescribing patterns are significantly influenced by patients' demographic and clinical characteristics.

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The authors declare that there are no conflicts of interest.

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