

RELIABILITY AND VALIDITY OF THE TURKISH VERSION OF THE PAIN QUALITY ASSESSMENT SCALE IN PATIENTS WITH CARPAL TUNNEL SYNDROME

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ABSTRACT

• **Objective:** There are some tests used by clinicians for defining and differentiating various pain types and following up the patient after initiating pain management therapy. The Pain Quality Assessment Scale (PQAS) is a questionnaire used in differentiation of neuropathic and non-neuropathic pain. The PQAS is also used in detection of the most common symptom of neuropathic pain which has a wide spectrum, and in the management and follow up of pain therapy in the light of its findings. The aim of this study was to examine whether the Turkish version of PQAS is a valid and reliable tool to assess pain.

• **Material and Method:** Seventy patients with carpal tunnel syndrome seen by two clinicians were evaluated by Turkish version of the PQAS in the morning and in the afternoon of the same day.

• **Results:** With respect to reliability, the correlations between PQAS total score and paroxysmal, surface, deep and sensitive pain were 0.830 ($p<0.001$), 0.853 ($p<0.001$), 0.893 ($p<0.001$) and 0.679 ($p<0.001$), respectively. With respect to validity, the correlation results between total score and paroxysmal, surface and deep pain subgroups of PQAS was found as $r:0.87$, $r:0.80$ and $r:0.87$, respectively.

• **Conclusion:** In painful situations, defining the pain type and detecting the dominant symptom are quite helpful in management of therapy. The results of this study suggest that the Turkish version of the PQAS is a reliable and valid instrument for the measurement of pain in Turkish patients that have diseases with neuropathic pain types.

• **Key Words:** Pain quality assessment scale, carpal tunnel syndrome, neuropathic pain, validation study, pain measurement Nobel Med 2010; 6(1): 26-33

KARPAL TÜNEL SENDROMLU HASTALARDA AĞRI KALİTESİ DEĞERLENDİRME SKALASI' NİN TÜRKÇE VERSİYONUNUN GEÇERLİLİK VE GÜVENİLİRLİĞİ

ÖZET

• **Amaç:** Farklı ağrı tiplerinin tanımlanarak ayrımının yapılması ve bu sonuca göre tedavinin düzenlenerek takip edilmesinde hekimlere yardımcı olan bazı testler bulunmaktadır. Ağrı Kalitesi Değerlendirme Skalası (AKDS) nöropatik ve non-nöropatik ağrının ayrımında, geniş semptom yelpazesi olan nöropatik ağrıda en fazla görülen semptomun tespit edilmesi ve bunlar ışığında ağrı tedavisinin düzenlenerek takip edilmesine yardımcı olan bir ankettir. Bu çalışmanın amacı AKDS' nin Türkçe versiyonunun ağrıyı değerlendirmek için geçerli ve güvenilir bir anket olup olmadığını incelemektir.

• **Materyal ve Metod:** Karpal tünel sendromu olan yetmiş hasta iki doktor tarafından AKDS' nin Türkçe versiyonu ile aynı gün içinde sabah ve öğleden sonra olmak üzere değerlendirildi.

• **Bulgular:** Güvenilirlik açısından paroksizmal, yüzeysel, derin ve hassas ile AKDS total skoru arasındaki korelasyon sırayla 0.830 ($p<0.001$), 0.853 ($p<0.001$), 0.893 ($p<0.001$) ve 0.679 ($p<0.001$) olarak değerlendirildi.

Geçerlilik açısından AKDS' nin paroksizmal, yüzeysel, derin alt tipleri ile total skor arasında korelasyon sonuçları ($r:0.87$, $r:0.80$, $r:0.87$) olarak elde edildi.

Bu sonuçlar AKDS' nin Türkçe geçerlilik ve güvenilirliğinin nöropatik ağrı tipine sahip hastalardaki ağrının değerlendirilmesinde uygun olduğunu göstermiştir.

• **Sonuç:** Ağrılı durumlarda ağrı tipinin belirlenmesi ve baskın olan semptomun saptanması tedavinin düzenlenmesine oldukça yardımcı olmaktadır. Bu çalışma ağrı tipinin ayrımına yardımcı olan ve tedavi takibinde de faydalanılabilecek AKDS' nin Türkçe versiyonunun geçerli ve güvenilir olduğunu göstermiştir.

• **Anahtar Kelimeler:** Ağrı kalitesi değerlendirme skalası, karpal tünel sendromu, nöropatik ağrı, geçerlilik çalışması, ağrı ölçümü Nobel Med 2010; 6(1): 26-33

INTRODUCTION

Carpal tunnel syndrome (CTS) is one of the most commonly encountered neuropathies of upper extremity. It develops due to entrapment of median nerve at carpal tunnel. The most common symptom of CTS is neuropathic pain.¹ Neuropathic pain syndrome is seen in heterogeneous clinical conditions.²

Clinical findings are classified as, spontaneous continuous or paroxysmal pain, power loss and pain, and allodynia and hyperalgesia. To assess the quality of neuropathic pain which has a wide spectrum is important for the differential diagnosis to differentiate the effectiveness of different pain therapies and detect the symptoms.^{3,4} For this assessment pain scales such as visual analog scale, Leeds Assessment of Neuropathic Symptoms (LANSS), and McGill pain questionnaire are available.⁵ Validity of Neuropathic Pain Scale (NPS) which consist of 10 questions is done to define the neuropathic pain conditions to make differential diagnosis, to assess the treatment results and to detect the treatment efficacy.⁶

Adding 10 more items to NPS makes it useful for assessment of both neuropathic and non neuropathic pain. For this reason "neuropathic" was omitted from its title and recalled as Pain Quality Assessment Scale (PQAS)⁴ which now contains 20 items that assess global pain intensity and unpleasantness, two spatial aspects of pain (i.e., 'deep' and 'surface' pain), and 16 different

pain quality items that are common to people with both neuropathic and non neuropathic pain.³

The aim of this study was to assess validity and reliability of the Turkish version of PQAS in differentiating pain whether it is neuropathic or non neuropathic, and whether it is helpful in evaluation and follow up of therapy of painful conditions.

MATERIAL and METHOD

The study group were consisted of patients with the diagnosis of mild to moderate degree electrophysiologically confirmed CTS who were seen at Selcuk University Meram Medical Faculty, Department of Physical Medicine and Rehabilitation out patient clinic. Seventy patients with positive Tinel's and Phalen tests and having numbness at their hands were first evaluated by electromyography (EMG). According to this assessment cases with mild CTS (slowdown in sensorial response) or moderate degree CTS were included in the study.⁷ Patients having history of diabetes mellitus, hypothyroidism, acromegaly, rheumatoid arthritis, wrist surgery, pregnancy and anatomic variation of the median nerve were excluded from the study. Ethical committee consent was obtained for the study.

The patients completed two PQAS forms on the same day, one in the morning and other in the afternoon. The clinicians that filled up the form and applied the →

EMG were not the same. Translation and back-translation method was used to adapt the PQAS into Turkish. The PQAS was first translated into Turkish by a native Turkish translator who spoke English fluently. The scale was then back-translated into English by a native English speaker who had not seen the original English version. The back-translated English version was compared with the original PQAS in English by one of the authors of this paper. PQAS contains 20 items that assess global pain intensity and unpleasantness, two spatial aspects of pain, and 16 different pain qualities.⁹ (Appendix 1 and Appendix 2). Following the introduction, respondents are asked to rate the severity of each of 20 pain domains using 0-10 numerical rating scales, where 0 = “no pain” or “not [sensation/item]” and 10 = “the most [descriptor] pain sensation imaginable.” As mentioned above, the pain domains assessed include two global domains (pain intensity and unpleasantness), two spatial domains (deep and surface), and 16 quality domains (sharp, hot, dull, cold, sensitive, tender, itchy, shooting, numb, electrical, tingling, cramping, radiating, throbbing, aching, and heavy).³

Statistical analysis

For internal consistency Cronbach alpha method was used. Test-retest reliability assessment was evaluated by Wilcoxon signed rank test. The relationship between sub items and 4 subgroup of PQAS was assessed with Spearman correlation test. If the differences were normally distributed, test and retest analysis of subgroups were done by Paired t test. Also retest reliability of subgroups were measured by interclass correlation coefficient (ICC). The ICC two mixed way model was used. Construct validity was compared with VAS. Correlation analysis was done. p value <0.05 was considered as statistically significant.

RESULTS

Seventy (64 female and 6 male) CTS cases, whose diagnoses were confirmed by EMG, were enrolled to the study. The mean age of the cases was 47.6±9.04 years. The demographic characteristics, test and retest results of PQAS are given in Table 1 and 2.

Reliability

Except deep item no difference was found between test and retest PQAS with Wilcoxon signed rank test. Internal validity assessed by Cronbach alpha was obtained between 0.730-0.930. The ICC values for paroxysmal, surface, deep and sensitive were 0.927, 0.889, 0.931 and 0.808, respectively. The correlation between PQAS total score and paroxysmal, surface,

Table 1: Demographic characteristics of the subjects (N: 70)

Age (years)	47.6±9.04
Gender	64F:4M
Duration of complaints (months)	57.7±72.4
F:female, M:male	

Table 2: Test and retest results of the PQAS

PQAS item	Test	Retest
Intense	6.0±2.3	6.1±2.2
Sharp	2.9±3.4	3.0±3.3
Hot	3.3±3.5	3.2±3.4
Dull	6.2±2.7	6.5±2.5
Cold	2.4±3.4	1.9±2.9
Sensitive	1.7±2.8	3.2±3.3
Tender	2.6±3.3	3.2±3.3
Itchy	3.3±3.6	3.1±3.4
Shooting	3.3±3.5	3.8±3.6
Numb	7.6±1.7	7.8±1.6
Electrical	3.7±3.5	3.8±3.5
Tingling	6.1±2.7	5.6±2.9
Cramping	2.1±3.1	2.2±3.0
Radiating	5.9±3.2	6.0±3.1
Throbbing	2.6±3.2	2.4±3.0
Aching	2.9±3.7	3.0±3.7
Heavy	4.2±3.7	4.1±3.6
Unpleasant	7.4±2.1	7.2±2.0
Paroxysmal	15.3±9.1	16.1±9.1
Superficial	22.1±9.7	21.6±9.4
Deep	18.0±11.1	18.2±11.5

deep and sensitive were 0.830 (p<0.001), 0.853 (p<0.001), 0.893 (p<0.001) and 0.679 (p<0.001) respectively. (Table 3).

Validity

For construct validity the correlation between VAS and paroxysmal, surface, deep and sensitive was found between 0.25 and 0.34. The correlation between these was considered as fair. When the correlation between sub items of PQAS and VAS was assessed, it was seen that the correlation with numb item was 0.790 and it has a high correlation with VAS.

The correlation between total score and paroxysmal, surface and deep subtypes of PQAS were r: 0.87, r: 0.80 and r: 0.87, respectively. The correlation between VAS and PQAS (paroxysmal, surface and deep) were found as 0.25, 0.34 and 0.31. The correlation between these was considered fair (Table 4). →

Table 3: The distribution of antihypertensive therapy		
	ICC	95% CI
Paroxysmal	0.927	0.883-0.955
Superficial	0.889	0.822-0.931
Deep	0.931	0.890-0.957
Tender	0.808	0.691-0.881
ICC: interclass correlation coefficient, CI: confidence interval		

Table 4: Correlation between PQAS and VAS for construct validity		
	VAS	p
Paroxysmal	0.250*	0.05
Superficial	0.340*	0.01
Deep	0.320*	0.01
Tender	0.320*	0.05
Numb	0.790†	0.001
*: fair correlation, †: strong correlation.		

DISCUSSION and CONCLUSION

PQAS is a form used in assessment and treatment follow up of pain encountered in many conditions (neuropathic and non neuropathic). It was shown that when neuropathic and non neuropathic pain conditions are evaluated with PQAS, pain effect zones were different at subgroups of PQAS. The reason for this is the presence of different pain types due to underlying different pain mechanisms.^{3, 6} Neuropathic and non neuropathic pains develop with different mechanisms and the therapies given are different.⁸ In this case PQAS questionnaire is helpful in determination of pain levels of patients and follow up of efficacy of the given therapy. In this study we showed the Turkish validity and reliability of PQAS which is helpful in differentiation of neuropathic and non neuropathic pains. Although presence of fair correlation between general VAS values of patients' and PQAS subgroups seems to be a limitation point in our study, the presence of a strong correlation with numb which is a sub item of PQAS, saves validity from this limitation. This is because the most commonly encountered symptoms in CTS are tingling and numbness. For this reason the most common definition of patients in general VAS was the degree of tingling. The limitation of our study was the low number of participants; however the data were enough for statistical analysis. Another limitation which is a non neuropathic pain group could be included to study together with neuropathic pain group. However, PQAS is not used in differentiation of these two pain group. As PQAS supplies information about depth of neuropathic pain, quality of pain, detection of different symptoms seen in neuropathic pain and follow up of therapy applied

for most severe complaint, it reduces the limitation occurred due to inclusion of only neuropathic pain in our study. In conclusion, we believe that in this study Turkish validity and reliability of PQAS in determination of neuropathic pain is shown.

A mechanism causing the development of neuropathic pain may be responsible for different symptoms in the same patient, and may change to a different mechanism in time. Symptoms seen in neuropathic pain have a wide spectrum. The most important clinical findings encountered in neuropathic pain are usually in burning character spontaneous, paroxysmal or stimulated pain, tingling, thermal and/or mechanical allodynia and dysesthesia.^{9, 10} Therapy of neuropathic pain should be specific to these symptoms as much as possible.^{2, 11, 13} To decide which of these symptoms is more dominant, PQAS questionnaire is quite efficient.

To differentiate the neuropathic pain from the non neuropathic pain, LANSS Pain Scale is used. However this scale could not reflect the wide symptom spectrum seen in neuropathic pain.⁵ Short form- McGill Pain Questionnaire includes 15 pain qualities.¹³ But PQAS consists 20 items to determine pain quality.⁴ With respect to other two questionnaires, PQAS has more advantage in determining pain quality and management of follow up of therapy. Jensen et al used PQAS in follow up of efficacy of two different therapies and detected that PQAS is more useful in treatment follow up.⁴ In another study Victor et al detected difference between PQAS of patients with neuropathic pain and non neuropathic pain, and they concluded that it can be helpful in differentiation of two pain types.³ In our study application of PQAS to Turkish population was very easy. We showed that in determination of pain, Turkish version of PQAS is a very reliable assessment tool. Reliability was obtained in internal consistency analysis (Chronbach alpha was between 0.730 and 0.930). ICC values, obtained from PQAS measurements done two times in a day, were above 0.80 and these values were between the intervals recommended for coefficient correlation (0.87-0.98).¹⁴ In construct validity, although a weak correlation between VAS and paroxysmal, surface, and deep parameters was obtained, a strong correlation with tingling which is an item of PQAS was present. This showed us that tingling, seems to be dominant complaint in CTS, reflects VAS value of the patient. Similarly, Victor et al detected that numbness and tingling, which are two pain descriptives, were dominant in CTS patient assessed with PQAS.³ Also in our study, most commonly complaint in patients with CTS was numbness.

There were three important reasons to make the Turkish version of PQAS, first; assessment of neuropathic→

pain, second; to apply appropriate therapy by assessment of every condition of neuropathic pain which has a wide spectrum third; follow up of applied therapy. We showed that the Turkish version of PQAS can be used safely for diseases with neuropathic pain such as CTS and it has Turkish validity and reliability.

Appendix 1. PAIN QUALITY ASSESSMENT SCALE

During the past week, please indicate on average which type of pain has been felt, each pain type's characteristics and degree of intensity, using the 19 scales below.

1. Please use the scale below to tell us how intense your pain has been over the past week, on average.

1	2	3	4	5	6	7	8	9	10
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Not pain The most intense sensation pain possible imaginable

2. Please use the scale below to tell us how sharp your pain has felt over the past week. Words describe sharp feelings include “like a knife”, “like a spike”, or “piercing”.

1	2	3	4	5	6	7	8	9	10
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Not sharp The most sharp sensation imaginable (like a knife)

3. Please use the scale below to tell us how hot your pain has felt over the past week. Words describe very hot pain include “burning” and “on fire”.

1	2	3	4	5	6	7	8	9	10
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Not hot The most hot sensation imaginable (“burning”)

4. Please use the scale below to tell us how dull your pain has felt over the past week.

1	2	3	4	5	6	7	8	9	10
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No distress The most dull sensation imaginable

5. Please use the scale below to tell us how cold your pain has felt over the past week. Words describe very cold pain include “like ice” and “freezing”.

1	2	3	4	5	6	7	8	9	10
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Not cold The most cold sensation imaginable (“freezing”)

6. Please use the scale below to tell us how sensitive your skin has been to light touch or clothing rubbing against it over the past week. Words used to describe sensitive skin include “like sunburned skin” and “raw skin”.

1	2	3	4	5	6	7	8	9	10
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Not imaginable The most sensitive sensitive sensation (“raw skin”)

7. Please use the scale below to tell us how tender your pain is when something has pressed against it over the past week. Another word used to described tender pain is “like a bruise”.

1	2	3	4	5	6	7	8	9	10
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Not tender The most tender sensation imaginable (“like a bruise”)

8. Please use the scale below to tell us how itchy your pain has felt over the past week. Words used to describe itchy pain include “like poison ivy” and “like a mosquito bite”.

1	2	3	4	5	6	7	8	9	10
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Not itchy The most itchy sensation imaginable (“like poison ivy”)

9. Please use the scale below to tell us how much your pain has felt like it has been shooting over the past week. Another word useed to describe shooting pain is “zapping”.

1	2	3	4	5	6	7	8	9	10
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No shooting The most shooting sensation imaginable (“zapping”)

10. Please use the scale below to tell us how numb your pain has felt over the past week. A phrase that can be used to describe numb pain is “like it is asleep”.

1	2	3	4	5	6	7	8	9	10
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Not numb The most numb sensation imaginable (“asleep”)

11. Please use the scale below to tell us how much your pain sensations have felt electrical over the past week. Words used to describe electrical pain include “shocks”, “lightning” and “sparking”.

1	2	3	4	5	6	7	8	9	10
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Not electrical sensation The most electrical imaginable (“shocks”)

12. Please use the scale below to tell us how tingling your pain has felt over the past week. Words used to describe tingling pain include “like pins and needles” and “prickling”.

1	2	3	4	5	6	7	8	9	10
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No tingling The most tingling sensation imaginable (“pins and needles”)

13. Please use the scale below to tell us how cramping your pain has felt over the past week. Words used to describe cramping pain include “squeezing” and “tight”.

1	2	3	4	5	6	7	8	9	10
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Not cramping The most cramping sensation imaginable (“squeezing”)

14. Please use the scale below to tell us how radiating your pain has felt over the past week. Another word used to describe radiating pain is “spreading”. →

1	2	3	4	5	6	7	8	9	10
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No radiating

The most radiating sensation imaginable ("spreading")

15. Please use the scale below to tell us how throbbing your pain has felt over the past week. Another word used to describe throbbing pain is "pounding".

1	2	3	4	5	6	7	8	9	10
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Not throbbing

The most throbbing sensation imaginable ("pounding")

16. Please use the scale below to tell us how aching your pain has felt over the past week. Another word used to describe aching pain is "like a toothache".

1	2	3	4	5	6	7	8	9	10
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Not aching

The most aching sensation imaginable ("like a toothache")

17. Please use the scale below to tell us how heavy your pain has felt over the past week. Other words used to describe heavy pain "pressure" and "weighted down".

1	2	3	4	5	6	7	8	9	10
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Not heavy

The most heavy sensation imaginable ("weighted down")

18. Now that you have told us the different types of pain sensations you have felt, we want you to tell us overall how unpleasant your pain has been to you over the past week. Words used to describe very unpleasant pain include "annoying", "bothersome", "miserable", and "intolerable". Remember, pain can have a low intensity but still feel extremely unpleasant, and some kinds of pain can have a high intensity but be very tolerable. With this scale, please tell us how unpleasant your pain feels.

1	2	3	4	5	6	7	8	9	10
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No unpleasantness

The most unpleasant pain sensation imaginable ("intolerable")

19. Finally, we want you to give us an estimate of the severity of your deep versus surface pain over the past week. We want you to rate each location of pain separately. We realize that it can be difficult to make these estimates, and most likely it will be a "best guess", but please give us your best estimate.

HOW INTENSE IS YOUR DEEP PAIN?

1	2	3	4	5	6	7	8	9	10
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No deep pain

The most intense deep pain sensation imaginable

HOW INTENSE IS YOUR SURFACE PAIN?

1	2	3	4	5	6	7	8	9	10
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No surface pain

The most surface pain sensation imaginable

20. Pain can also have different time qualities. For

some people, the pain comes and goes and so they have some moments that are completely without pain; in other words the pain "comes and goes". This is called intermittent pain. Others are never pain free, but their pain types and pain severity can vary from one moment to the next. This is called variable pain. For these people, the increases can be severe, so that they feel they have moments of very intense pain ("breakthrough" pain), but at other times they can feel lower levels of pain ("background" pain). Still, they are never pain free. Other people have pain that really does not change that much from one moment to another. This is called stable pain. Which of these best describes the time pattern of your pain (please select only one):

☐ I have intermittent pain (I feel pain sometimes but I am pain-free at other times)

☐ I have variable pain ("background" pain all the time, but also moments of more pain, or even severe "breakthrough" pain or varying types of pain)

☐ I have stable pain (constant pain that does not change very much from one moment to another, and no pain-free periods).

Appendix 2. AĞRI KALİTESİ DEĞERLENDİRME SKALASI

LÜTFEN SON HAFTA SÜRESİNCE, ORTALAMA OLARAK her bir ağrı tipinin niteliğinin ne kadar çok olduğunu ve hangi ağrı tipini hissedip, hissetmediğinizi derecelendirmek için aşağıdaki 19 derecelendirme skalalarını kullanınız.

1. Son hafta süresince, ortalama olarak ağrınızın ne kadar yoğun olduğunu belirtiniz.

1	2	3	4	5	6	7	8	9	10
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Ağrı yok

Olabilecek en yoğun ağrı duygusu

2. Son hafta süresince hissettiğiniz ağrının ne kadar batıcı olduğunu belirtiniz.

Batıcı duygusunu tanımlamak için kullanılan kelimeler "bıçak gibi", "neşter gibi" veya "delici" terimlerini içermektedir.

1	2	3	4	5	6	7	8	9	10
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Batma yok

Olabilecek en batıcı ağrı ("bıçak saplanır gibi")

3. Son hafta süresince hissettiğiniz ağrının ne kadar yakıcı olduğunu belirtiniz. Çok yakıcı olduğunu belirtmek için kullanılan kelimeler "yanma" ve "ateş gibi" terimlerini içermektedir.

1	2	3	4	5	6	7	8	9	10
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Yanma yok

Olabilecek en yakıcı his ("ateşte yanıyor gibi") →

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4. Son hafta süresince hissettiğiniz ağrının ne kadar sıkıntı verici olduğunu belirtiniz.

1	2	3	4	5	6	7	8	9	10
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Sıkıntı verici değil

Olabilecek en sıkıntı verici ağrı duygusu

5. Son hafta süresince hissettiğiniz ağrının ne kadar soğuk olduğunu belirtiniz. Ağrının çok soğuk olduğunu tanımlamak için kullanılacak kelimeler “buz gibi” veya “donudurucu” terimleri içermektedir.

1	2	3	4	5	6	7	8	9	10
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Soğuk değil

Olabilecek en şiddetli soğuk (“buz gibi”)

6. Son hafta süresince cildinizin dokunma veya giysilere ne kadar duyarlı olduğunu belirtiniz. Hassas cildi tanımlamak için kullanılacak kelimeler “güneşte yanmış gibi” veya “ağrılı deri” terimlerini içermektedir.

1	2	3	4	5	6	7	8	9	10
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Duyarlı değil

Olabilecek en şiddetli duyarlılık (“ağrılı deri”)

7. Son hafta süresince ağrınızın basınca maruz kalınca ne kadar hassas olduğunu belirtiniz. Hassasiyeti tanımlamak için kullanılan diğer bir kelime “eziliyor gibi” terimidir.

1	2	3	4	5	6	7	8	9	10
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Hassas değil

Olabilecek en şiddetli hassasiyet (“eziliyor gibi”)

8. Son hafta süresince ağrınızın ne kadar kaşıntı verici olduğunu belirtiniz. Kaşıntılı ağrı terimini tanımlamak için kullanılan diğer kelimeler “zehirli sarmaşıkla temas gibi” veya “sivrisinek ısırığı gibi” terimleri içermektedir.

1	2	3	4	5	6	7	8	9	10
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Kaşıntı verici değil

Olabilecek en şiddetli kaşıntı (“zehirli sarmaşıkla temas gibi”)

9. Son hafta süresince ağrınızın ne kadar vurucu olduğunu belirtiniz. Vurucu ağrıyı tanımlamak için kullanılan diğer bir kelime “dönem dönem giren ağrı” terimidir.

1	2	3	4	5	6	7	8	9	10
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Vurucu değil

Olabilecek en şiddetli vuruculukta (dönem dönem giren ağrı)

10. Son hafta süresince ağrınızın ne kadar uyuşmuş gibi olduğunu belirtiniz. Uyuşma tarzı ağrıyı tanımlamak için kullanılan diğer bir kelime “hissizlik gibi” terimidir.

1	2	3	4	5	6	7	8	9	10
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Uyuşma yok

Olabilecek en şiddetli uyuşma (“hissizlik gibi”)

11. Son hafta süresince hissettiğiniz ağrınız elektriklenme tarzında mıdır? Elektriklenme tarzında ağrıyı tanımlamak için kullanılan terimler “şok”,

“şimşek” ve “kıvılcımlanma” terimlerini içermektedir.

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Elektriklenme, ağrı yok

Olabilecek en şiddetli elektriklenme tarzı ağrı (“şokvari”)

12. Son hafta süresince ağrınızın ne kadar karıncalanma tarzında olduğunu belirtiniz. Karıncalanma tarzında ağrıyı tanımlamak için kullanılan diğer kelimeler “uyuşma” veya “iğne batma duygusu” terimlerini içermektedir.

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Karıncalanma yok

Olabilecek en şiddetli karıncalanma (“uyuşma”)

13. Son hafta süresince hissettiğiniz ağrının ne kadar kramp tarzında olduğunu belirtiniz. Kramp tarzı ağrıyı tanımlamak için kullanılan diğer kelimeler “baskıcı” ve “sıkı” terimleridir.

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Kramp yok

Olabilecek en şiddetli Kramp tarzında (“baskıcı”)

14. Son hafta süresince hissettiğiniz ağrınızın ne kadar yayıldığı belirtiniz. Yayılan ağrıyı tanımlamak için kullanılan diğer bir kelime “dağılma” terimidir.

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Yayılma yok

Olabilecek en şiddetli yayılma (“dağılma”)

15. Son hafta süresince ağrınızın ne kadar zonklayıcı olduğunu belirtiniz. Zonklayıcı ağrıyı tanımlamak için kullanılan diğer bir kelime “darbe gibi” terimidir.

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Zonklama yok

Olabilecek en şiddetli zonklama (“darbe gibi”)

16. Son hafta süresince ağrınızın ne kadar acı verici olduğunu belirtiniz. Acı veren ağrıyı tanımlamak için kullanılan diğer bir kelime “diş ağrısı gibi” terimidir.

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Acı yok

Olabilecek en şiddetli acı (“diş ağrısı gibi”)

17. Son hafta süresince hissettiğiniz ağrınızın ne kadar ağır olduğunu belirtiniz. Ağır ağrıyı tanımlamak için kullanılan diğer kelimeler “basınç” ve “ağırlık var gibi” terimleridir.

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Ağır değil

Olabilecek en şiddetli ağırlık (“ağırlık var gibi”)

18. Hissettiğiniz bu farklı ağrı tiplerinin son hafta süresince toplamda ne kadar hoşnutsuzluk yarattığını belirtiniz. Hoşnutsuzluğu tanımlamak için kullanılan diğer kelimeler “sinir bozucu”, “can sıkıcı”, “perişan edici” ve “dayanılamaz” terimleridir. Unutmayın ki ağrı düşük →

yoğunlukta fakat aşırı hoşnutsuz edici olabilir, bazı ağrı türleri yüksek yoğunlukta fakat dayanılabilir olabilir.

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Hoşnutsuzluk yok

Olabilecek en fazla hoşnutsuzluk yaratan ağrı ("dayanılamaz")

19. Yüzeysel ağrınızın ve derin ağrınızın şiddetini belirtin.

DERİN AĞRINIZ NE YOĞUNLUKTADIR?

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Derin ağrı yok

Olabilecek en yoğun derin ağrı

YÜZEYEL AĞRINIZ NE YOĞUNLUKTADIR?

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Yüzeysel ağrı yok

Olabilecek en yoğun yüzeysel ağrı

20. Aşağıdakilerden hangisi ağrınızın zamansal seyrini en iyi tanımlar?

Lütfen yalnızca bir yanıtı işaretleyin.

☐ Gelip-geçici ağrı tipine sahibim (bazen ağrı hissediyorum, fakat diğer zamanlarda ağrısızım)

☐ Değişken ağrı tipine sahibim (zeminde her zaman bir ağrı hissediyorum, fakat daha ağırlı zamanlarım veya şiddetli ağrı dönemlerim oluyor, ağrım aniden ortaya çıkıyor veya ağrının tipi değişebiliyor)

☐ Değişmeyen ağrı tipine sahibim (dönemden döneme çok fazla değişmeyen sabit ağrı ve ağrısız dönemin olmaması)



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REFERENCES

- 1 Aroori A, Spence RAJ. Carpal Tunnel Syndrome. Ulster Med J 2008; 77: 6-17.
- 2 Attal N. Chronic neuropathic pain: mechanisms and treatment. Clin J Pain 2000; 16: 118-130.
- 3 Victor TW, Jensen MP, Gammaitoni AR, et al. The Dimensions of Pain Quality: Factor Analysis of the Pain Quality Assessment Scale. Clin J Pain 2008; 24: 550-555.
- 4 Jensen MP, Gammaitoni AR, Olaleye DO, et al. The Pain Quality Assessment Scale: Assessment of Pain Quality in Carpal Tunnel Syndrome. The Journal of Pain 2006; 7: 823-832.
- 5 Yucel A, Senocak M, Orhan EK, Cimen A, Ertas M: Results of Leeds Assessment of Neuropathic Symptoms and signs Pain Scale in Turkey: A validation study. J Pain 2004; 4: 427-432.
- 6 Krause SJ, Backonja MM. Development of a neuropathic pain questionnaire. Clin J Pain 2003; 19: 306-314.
- 7 Williams FH, Johns JS, Weiss JM, et al. Neuromuscular rehabilitation and electrodiagnosis. 1.mononueropathy. Arch Phys Med Rehabil 2005; 86: 3-10.
- 8 Dworkin RH, Jensen MP, Gammaitoni AR, Olaleye DO, Galer BS. Symptom profiles differ in patients with neuropathic versus non-neuropathic pain. J Pain 2007; 8:118-126.
- 9 Dickinson AH, Mathews EA, Suzuki R. Central nervous system mechanisms of pain in peripheral neuropathy. In Hansson PT, Fields HL, HillG, Marchettini P, editors. Neuropathic Pain: Pathophysiology and Treatment, IASP Press Seattle; 2001: 85-106.
- 10 Attal N, Bouhassira D. Mechanisms of pain in peripheral neuropathy. Acta Neurol Scand Suppl 1999; 173: 12-24.
- 11 Galer BS, Jensen MP. Development and preliminary validation of a pain measure specific to neuropathic pain: The Neuropathic Pain Scale. Neurology 1997; 48: 332-338.
- 12 Jensen MP. Review of measures of neuropathic pain. Curr Pain Headache Rep 2006; 10: 159-166.
- 13 Yakut Y, Yakut E, Bayar K, Uygur F. Reliability and validity of the Turkish version short-form McGill pain questionnaire in patients with Rheumatoid Arthritis. Clin Rheumatol 2007; 26: 1083-1087.
- 14 Georgoudis G, Oldham JA, Watson PJ. Reliability and sensitivity measures of the Greek version of the short form of the McGill Pain Questionnaire. Eur J Pain 2001; 5: 109-118.