

Journal of Surgery and Medicine

The frequency and reasons for the use of analgesic drugs in patients aged 65 years or older; an experience of family medicine unit

65 yaş ve üstü hastaların analjezik ilaç kullanım sıklığı ve nedenleri; bir aile hekimliği birimi deneyimi

Ahmet Öksüz¹, Yıldız Atadağ², Abdülkadir Aydın³, Didem Kaya⁴

¹Ulas Family Health Centre, Sivas, Turkey
²Sahinbey Baglarbası Family Health Center, Gaziantep, Turkey
³Umraniye Adem Yavuz Family Health Center, Istanbul, Turkey
⁴Uskudar Number 23 Family Health Center, Istanbul, Turkey

Abstract

Aim: The elderly population in Turkey is increasing. One of the most common health problems among the elderly population, which increases day by day, is pain. The use of analgesics due to pain is seen at very high levels and the use of analgesics in the prescription is increasing. In this study, we aimed to determine the frequency and causes of drug use among elderly patients who applied to our unit of family medicine and used regular pain relievers.

Methods: Our study was done by retrospectively scanning the files of 65 years old and over individuals who applied for Sivas Ulas Family Health Centre for any reason. The number of patients aged 65 years and over registered to the family health centre is 286. 43 individuals who regularly used NSAID were included in the study.

Results: Forty-three patients (15%) who used regular analgesic medication were present in our polyclinic admission for any reason. Participants were using analgesic medication due to diffuse muscle and skeletal pain in 48.8% (n=21), gonarthrosis in 48.8% (n=21) and arthritis in 2.3% (n=1). The analgesic drug was using 32.6% (n=14) frequently paracetamol.

Conclusion: As a result, the use of analgesics is as commonplace in our country as it is in the world. Drug use should be monitored regularly, especially in elderly patients, as serious side effects associated with analgesic use may occur.

Keywords: Geriatrics, Analgesics, Family Practice

Öz

Amaç: Ülkemizde yaşlı nüfusu giderek artmaktadır. Her geçengün artış gösteren yaşlı nüfus arasında en yaygın görülen sağlık sorunlarından birisi de ağrıdır. Ağrılar nedeniyle analjeziklerin kullanımı çok yüksek seviyelerde görülmektedir ve reçetesi analjezik kullanımı artmaktadır. Bu çalışmamızda aile hekimliği birimimize başvuran ve düzenli ağrı kesici kullanan yaşlı hastaların ilaç kullanım sıklığını ve nedenlerini belirlemeyi amaçladık.

Yöntemler: Çalışmamız Sivas Ulaş Aile Sağlığı Merkezi'ne herhangi bir nedenle başvuran 65 yaş ve üzeri bireylerin dosyaları retrospektif olarak taranarak yapıldı. Aile sağlığı merkezimize kayıtlı 65 yaş ve üzeri hasta sayısı 286'dır. Çalışmamıza düzenli olarak NSAİİ kullanan 43 birey alınmıştır.

Bulgular: Herhangi bir nedenle polikliniğimize başvuruda bulunan ve düzenli analjezik ilaç kullanan 43 kişi (%15) bulunmaktaydı. Katılımcıların %48,8'i (n=21) yaygın kas ve iskelet ağrısı, %48,8'i (n=21) gonartroz ve %2,3'ü (n=1) artrit nedeniyle analjezik ilaç kullanılmaktaydı. Kullanılan analjezik ilaç%32,6 (n=14) sıklıkta parasetamol idi.

Sonuç: Sonuç olarak analjezik kullanımı dünyada olduğu kadar ülkemizde de yaygın olan bir durumdur. Özellikle yaşlı bireylerde analjezik kullanımına bağlı ciddi yan etkiler ortaya çıkarılabileceğinden dolayı ilaç kullanımının düzenli olarak takip edilmesi gereklidir.

Anahtar kelimeler: Geriatri, Analjezikler, Aile Hekimliği

Corresponding author/ Sorumlu yazar:
Ahmet Öksüz

Address / Adres: Ulas Family Health Center Ulas
County State Hospital Ulas / Sivas / Turkey
E-mail: dr.ahmett@gmail.com

Ethics Committee Approval: Ethics committee approval was not received because the study was performed retrospectively.

Etik Kurul Onayı: Çalışmamız retrospektif olması nedeniyle etik kurul onayı alınmamıştır.

Informed Consent: Informed consent was not received because the study design was retrospective.

Hasta Onamı: Çalışmanın retrospektif olması nedeniyle hasta onamı alınmamıştır.

Conflict of Interest: No conflict of interest was declared by the authors.

Çıkar Çatışması: Yazarlar çıkar çatışması bildirmemişlerdir.

Financial Disclosure: The authors declared that this study has received no financial support.
Finansal Destek: Yazarlar bu çalışma için finansal destek almadıklarını beyan etmişlerdir.

Received / Geliş Tarihi: 03.04.2017
Accepted / Kabul Tarihi: 16.04.2017
Published / Yayın Tarihi: 24.04.2017

Copyright © JOSAM



How to cite / Atf için : Öksüz A, Atadağ Y, Aydın A, Kaya D. The frequency of analgesic drug use in 65 years and above diseases and their causes; an experience of family medicine unit. J Surg Med. 2017;1(1):12-14.

Introduction

Senility is a life period in which many pathologies and their symptoms are included. With an increase in average lifespan, the elderly population rate is increasing in communities. As in all over the world, the elderly population is growing increasingly in Turkey. The population rate of 65 years and above, which was 4.3% in the general census in 1990, rise to 8% in 2014 in Turkey. In 2050, it is predicted that the proportion of the population aged 65 and over will reach 17.6% [1,2].

Pain affects people of all ages. The prevalence of pain is approximately 50% in elderly people and is gradually increasing. Musculoskeletal system diseases are one of the most important causes of chronic pain that disturb life quality in the geriatric period [3]. The most important problems encountered in the use of drugs used in the diseases of the musculoskeletal system are the obstacles to ensuring effective pain control in the elderly. Studies show that the incidence of pain in the elderly in the United States is between 25-50% and in nursing homes this rate reaches up to 70% [4]. Nevertheless, the American Geriatrics Association has determined that 25% of the elderly are not getting any treatment for pain [5]. In a multi-centric study in Turkey, 64,7% of the elderly were found to suffer from chronic pain [6].

On the other hand, elderly people use widespread inappropriate analgesics. American Geriatrics Association recommends starting low doses of treatment and increase doses when needed and avoid polypharmacy in the guidelines for chronic pain treatment in the elderly [7]. However, a study conducted in the United States has shown that about 40% of people aged 65 years and over have been prescribed one or more non-steroidal anti-inflammatory drugs (NSAIDs) per year [8]. Most of the patients with chronic pain were observed to use two or more of the analgesic drugs [9].

Turkish Medicines and Medical Devices Agency (TMMDA), Prescription Information System According to the data of 2014, a total of 47,307,662 prescriptions were written for elderly patients. 9,603,348 prescriptions containing non-steroidal anti-inflammatory and anti-rheumatic drugs (M01A) were prescribed by family physicians and 3,353,726 prescriptions were issued by specialist physicians for the 65 years and older patients [10].

NSAIDs exhibit their effects by preventing the production of various prostaglandins through inhibition of cyclooxygenase (COX) enzymes [2]. NSAIDs are often used in inflammation with acute and chronic pain. Inhibiting the synthesis of prostaglandins, which have important effects on glomerular and tubular functions, lead to major complications such as hyperkalemia, hyponatremia, edema, hypertension, acute renal failure, acute interstitial nephritis and analgesic nephropathy [11].

In this study, we aimed to determine the frequency of use of the drug and the factors affecting it in patients aged 65 years and older admitted to our family medicine unit.

Material and methods

The form of the research, where it is made, sample selection.

This research was planned as a descriptive, cross-sectional analytical study. The ethical committee approval was not received because the patient data was scanned retrospectively in our study. This study was done retrospectively by scanning the files of individuals aged 65 years and over for any reason to Sivas Ulaş Family Health Centre. The frequency of use of drugs, the drugs they use, and the frequency of use are constantly being questioned by patients who visit our clinic. The number of patients aged 65 years and over registered to the family health center is 286. 43 individuals who regularly used NSAID were included in the study.

For the statistical analyzes, SPSS (Statistical Package for Social Sciences) for Windows 20.00 program was used. Descriptive statistics for continuous variables are summarized as mean and standard deviation, and descriptive statistics for categorical data are tabulated as frequency and percentage. Chi-square test was used for comparison of categorical data. The results were evaluated in a confidence interval of 95% and a significance level of $p < 0.05$.

Results

51% of the 286 individuals enrolled in the Family medicine unit 65 years and older were female ($n=146$), 49% of them were male ($n=140$) and the mean age was 73.8 ± 7.08 . There were 43 people (15%) who applied to our outpatient clinic for any reason and were using a regular drug-intensive medication. 36.1% of the study was female ($n=25$), 26.0% male ($n=18$), mean age 75.7 ± 6.81 39.0 of them were married and 23.1% of them divorced or widowed.

Participants were using analgesic medication due to diffuse muscle and skeletal pain in 48.8% ($n=21$), gonarthrosis in 48.8% ($n=21$) and arthritis in 2.3% ($n=1$). The analgesic medications used were 32.6% ($n=14$) paracetamol, 18.6% ($n=8$) diclofenac potassium, 14.0% ($n=6$) etodolac, 11.6% ($n=5$), dextketoprofen trometamol and 4.7% ($n=2$) ibuprofen, meloxicam 4.7% ($n=2$), etofenamate 2.3% ($n=1$), naproxen sodium 2.3% ($n=1$) ketoprofen 2.3% ($n=1$) flurbiprofen, and 2.3% ($n=1$) indomethacin. Participants were divided into ages 65-69, ages 70-74, ages 75-79, ages 80-84 and ages 85 and over. Two patients (25%) of 8 patients (18.6%) between 65-69 years of age were using paracetamol, diclofenac potassium and etodolac. Three patients (21.4%) were using paracetamol and dextketoprofen trometamol in 14 patients (32.6%) between 70-74 years of age. Five (50.0%) of 10 participants (23.3%) between 75-76 years of age were using paracetamol. 8 (18.6%) of 80-84 year olds (37.5%) were using diclofenac potassium. 85 years of age and over 3 participants (7.0%) were all using paracetamol.

Women used 36% ($n=9$) frequently paracetamol, 12.0% ($n=3$) frequently used diclofenac potassium and 12.0% ($n=3$) frequently used dextketoprofen trometamol; 27.8% ($n=5$) frequently used paracetamol, 27.8% ($n=5$) frequently used diclofenac potassium and 22.4% ($n=4$) etodolac in men.

48.0% ($n=12$) of the women were using analgesic due to widespread muscle and joint pain, 48.0% ($n=12$) of them were using analgesic due to gonarthrosis and 4.0% ($n=1$) of them were using due to arthritis. 50.0% ($n=9$) of men were using analgesics for widespread muscle and joint pain and the other half were using analgesics due to gonarthrosis.

Discussion

The population in the world is the oldest population showing the fastest increase. In Turkey, the elderly population (65 years and above) is estimated to be 8% in 2014, whereas population projections will rise to 10.2% in 2023, 20.8% in 2050 and 27.7% in 2075 [1]. One of the most common health problems among the elderly population, which is increasing day by day, is pain [12].

In our study, when analyzing the analgesics of individuals aged 65 years and over people who were using regular analgesic medication, paracetamol was used most frequently in 32.6% of cases. When the analgesic drugs were classified, participants mostly used NSAIDs at a frequency of 67.4%. In Balbaloğlu's study, the use of NSAID and paracetamol was the most common use of analgesics over 65 years of age, whereas the use of NSAIDs alone was the second most common [13].

In our study, 15% of the population in our family medicine unit were taking analgesics regularly on a daily basis. Bıyık et al. found the analgesic use rate of the elderly individuals was 42.9%, Güler et al. found that this ratio is 90.6% [14,15]. In a different study, elderly people who use analgesics were been reviewed and 16% of participants had non-narcotic analgesics, 32% of them had poor opioids, 26% of them had morphine or derivative drugs, and 27% of them had adjuvant drugs [16]. In Hwang et al.'s study it is reported that 80% of elderly individuals with severe pain use opioids [17]. The presence of low analgesic use in our study may be thought of as patients not taking analgesics without prescription or not telling that they use analgesics.

48.8% (n=21) of the participants were using analgesic due to widespread muscle and joint pain, 48.8% (n=21) of them were using analgesic due to gonarthrosis and 2.3% (n=1) of them were using due to arthritis. It was determined that elderly individuals experienced 64.6% knee pain and 58.5% headache at the highest rate [18]. In another study, it was reported that in elderly people, joint pain, chronic pain in legs and feet, prevalence of joint pain was 2 times higher in younger than 65 years old, and foot and leg pain frequency increased by increasing age [19]. In different studies, it was found that 74.2-78.2% of the pain seen in the elderly was joint pain and 50.5% of the elderly experienced widespread pain [18,20].

As a result, the use of analgesics is as common in Turkey as it is in the world. Drug use should be monitored regularly, especially in elderly people, as it can lead to serious side effects associated with the use of analgesics. Stepwise pain treatment should be widespread in analgesic treatment. In the elderly, more attention should be paid to prescribing analgesic drugs.

References

1. TÜİK. İstatistiklerle Yaşlılar 2014. www.tuik.gov.tr/IcerikGetir.do?istab_id=265 [Access date: 20.09.2017].
2. Birsen Altay, Figen Çavuşoğlu, Ayşe Çal. Yaşlıların sağlık algısı, yaşam kalitesi ve sağlıkla ilgili yaşam kalitesini etkileyen faktörler. TAF Prev Med Bull. 2016;15 (3): 18.
3. Barkin RL, Beckerman M, Blum SL, Clark FM, Koh EK, Wu DS. Should nonsteroidal anti-inflammatory drugs (NSAIDs) be

- prescribed to the older adult? Drugs & Aging, 2010;27(10) :775–89.
4. Ferrell BA. Managing pain and discomfort in older adults near the end of life. Annals of Long-Term Care; Presented at the American Geriatrics Society Annual Scientific Meeting; May 14, 2003; Baltimore, MD. 2003.
5. Won AB, Lapane KL, Vallow S, Schein J, Morris JN, Lipsitz LA. Persistent nonmalignant pain and analgesic prescribing patterns in elderly nursing home residents. J Am Geriatr Soc. 2004;52:867–74.
6. Tanriverdi G., Okanlı A., Cetin H., Ozyazicioglu N., Sezgin H., Kararman H.O., et al., "Pain In The Elderly Population", Turkish Journal of Geriatrics 2009; 12 (4): 190-197.
7. American Geriatrics Society. The management of persistent pain in older persons. J Am Geriatr Soc. 2002;50:205–224.
8. Ray WA, Stein MC, Byrd V, Shorr R, Picher JW, Gideon P et al. Educational program for physicians to reduce use of non-steroidal anti-inflammatory drugs among community-dwelling elderly persons: A randomized controlled trial. Med Care.2001;39(5):425–435.
9. Clark J. Chronic pain prevalence and analgesic prescribing in a general medical population. J Pain Symptom Manage. 2006;23: 131–7.
10. T.C. Sağlık Bakanlığı, Türkiye İlaç ve Tıbbi Cihaz Kurumu Reçete Bilgi Sistemi Verileri, 2015.
11. Yıldırım Y, Yılmaz Z, Kara AV, Kadioğlu AK, Yılmaz ME. Nonsteroid Antienflamatuvar İlaçlar ve Böbrek. Konuralp Tıp Dergisi 2016;8(1):56-60.
12. Helme RD. Chronic pain management in older people. European Journal of Pain 2001; 5: 31–36.
13. Balbaloğlu Ö. 65 yaş üstündeki bireylerin ağrı kesici kullanım sıklığı ve özellikleri. Bozok Tıp Derg 2017;7(2):7-13.
14. Bıyık A, Özgür G, Özsoy SA, Erefe İ. Huzurevinde yaşayan yaşlıların fiziksel sağlık sorunları ve hastalıklarına yönelik ilaç kullanma davranışları. Geriatri 2002;5(2):68-74.
15. Güler G, Güler N, Kocataş S, Akgül N. Yaşlıların sağlık bakım gereksinimleri. Cumhuriyet Tıp Derg 2009;31(4):367-73.
16. Bernabei R, Gambessi G, Lapane K. Management of pain in elderly patients with cancer. JAMA 1998;279(23):1877-83.
17. Hwang U, Richardson LD, Harris B, Morrison RS. The quality of emergency department pain care for older adult patients. J Am Geriatr Soc 2010;58(11):2122-8.
18. Özel F, Yıldırım Y, Fadiloğlu Ç. Huzurevinde yaşayan yaşlılarda ağrı yönetimi. Ağrı 2014;26(2):57-64.
19. Helme RD, Gibson SJ. Pain in older people. In: Crombie IK (ed). Epidemiology of Pain. Seattle: IASP Press, 1999: 103-12.
20. Brown ST, Kirkpatrick MK, Swanson MS, McKenzie IL. Pain experience of the elderly. Pain Manag Nurs 2011;12(4):190-6.