ARAŞTIRMA YAZISI / RESEARCH ARTICLE

ROMATOLOJİ POLİKLİNİĞİNE BAŞVURAN GERİYATRİK HASTALARIN RETROSPEKTİF OLARAK DEĞERLENDİRİLMESİ

RETROSPECTIVE ASSESSMENT OF GERIATRIC PATIENTS APPLYING TO THE RHEUMATOLOGY OUTPATIENT CLINIC

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ÖZET

AMAÇ: Tüm dünyada geriatrik popülasyonda hızlı bir artış yaşanmaktadır. Geriatrik popülasyonun sık başvurduğu birimlerden bir tanesi de romatoloji poliklinikleridir. Bu çalışmada romatoloji polikliniğine başvuran hastaların özelliklerini, şikayetlerini ve tanılarını incelemeyi amaçladık.

GEREÇ VE YÖNTEM: 01.10.2020 - 01.10.2022 tarihleri arasında romatoloji polikliniğine başvuran hastalar retrospektif olarak hastane elektronik dosya sisteminden tarandı. 65 yaşın üzerindeki hastalar çalışmaya dahil edildi.

BULGULAR: Hastaların yaş ortalaması 71,5±4,83 olarak görüldü. Çalışmaya dahil edilen hastaların %70'i kadın %30 'u erkekti. En sık başvuru nedeninin ağrı şikayeti olduğu görüldü. Hastalara en sık osteoartrit ve romatoid artrit tanısı konuldu.

SONUÇ: Romatoloji polikliniğinde en sık dejeneratif hastalık tanısı konulurken, inflamatuar romatizmal hastalıklar içerisinden en sık romatoid artrtit tanısı konulmuştur.

ANAHTAR KELİMELER: Geriatri, Osteoartrit, Romatoloji polikliniği, Romatoid artrit.

ABSTRACT

OBJECTIVE: The geriatric population around the world is rapidly increasing. Rheumatology outpatient clinics are among the frequently visited units by the geriatric population. In this study, our aim is to investigate the characteristics, complaints and diagnoses of the patients applying to a rheumatology outpatient clinic.

MATERIAL AND METHODS: The patients who applied to the rheumatology outpatient clinic between 01.10.2020 - 01.10.2022 were retrospectively searched on the hospital's electronic file system. Patients over 65 years old were included in this study.

RESULTS: The average age of the patients was found 71.5±4.83. 70% of the patients included in the study were female and 30% were male. The most prevalent reason to visit the outpatient clinic was pain. Osteoarthritis and rheumatoid arthritis diagnosis were the most prevalent diagnosis among the patients.

CONCLUSIONS: While the most prevalent diagnosis in the rheumatology outpatient clinic was degenerative diseases, rheumatoid arthritis was the most prevalent diagnosis among inflammatory rheumatism diseases.

KEYWORDS: Geriatric, Osteoarthritis, Rheumatology outpatient clinic, Rheumatoid arthritis.

INTRODUCTION

The World Health Organization (WHO) defined individuals over 65 years old as old age and individuals over 85 years old as very old age (1). With the improvements in living conditions, the population of older individuals around the world is increasing. According to Turkish Statistical Institution data, the population of older individuals compared to the general population in Turkey increased by 2.3 times from 1935 to 2019 and reached 9.1% of the population (2). The World Health Organization predicts that population of the old individuals might reach 1.2 billion around the world by 2025 (3). The increasing old age population also increases hospital visitations and acute-chronic diseases in older individuals.

Musculoskeletal system pathologies are among the most prevalent reasons for old individuals to visit the hospital. One in every four applications to first-level health institutions is related to the musculoskeletal system (4). In older patients, osteoarthritis and soft tissue rheumatism as well as various diseases related to the musculoskeletal system increases. It is known that Crystalline arthropathies such as rheumatoid arthritis (RA), polymyalgia rheumatica, gout, and calcium pyrophosphate arthropathy that advance with inflammation increases in the geriatric population compared to other inflammatory problems (5).

Rheumatology outpatient clinics are units that offer services related to muscle, joint, connective tissue, soft tissue, vasculitis and autoimmune diseases and the geriatric population frequently applies to these clinics. In this study, we aim to investigate the application complaint, age-gender distribution and diagnosis of 65 years old and above individuals who have applied to the rheumatology outpatient clinic of a third-level hospital.

MATERIAL AND METHODS

Patients who applied to the Afyonkarahisar Health Sciences University, Department of Internal Medicine / Rheumatology outpatient clinic between 01.10.2020 - 01.10.2022 were retrospectively searched from the hospital electronic file system. Patients over 65 years old were included in this study. The first application of the patients with multiple applications for the same complaint and the following applications of the same patient were excluded. The application complaints, laboratory tests and diagnosis after the examination of these patients were obtained. The obtained data were evaluated.

Ethical Committee

The approval of the Afyonkarahisar University of Health Sciences ethics committee dated 04.11.2022 and numbered 2022/547 was provided for this study.

Statistical Analysis

SPSS 26.0 (IBM Corp. 2019 IBM SPSS Statistics for Windows, version 26.0. Armonk, NY: IBM Corp.) program was used for statistical analysis.

RESULTS

A total of 655 patients were included in this study. Among the patients included in this study, the youngest patient was 65 years old and the oldest patient was 92 years old. The average age of the patients was 71.5±4.83. 198 (30%) of the patients were male and 457 (70%) were female. Anti-nuclear antibody (ANA) positivity (36.3%) was observed in 238 of the patients who applied to the outpatient clinic. The most common ANA pattern was the nucleolar ANA pattern in 50 patients (21%). A significant elevation was found in 152 (23%) patients who were requested to have Rheumatoid Factor (RF) out of 650 patients. The laboratory test results of the patients are given in **Table 1**.

Table 1: The laboratory results of the patients

	N	MINIMUM	MAXIMUM	MEAN	STD.DEVIATION
WBC(mCl)	655	5.13	33930	7905	2855.87
Neutrophil(mCl)	655	6.81	30510	5177	2308
Sedimentation(mm/h)	655	1	140	33.04	25.04
Creatinine(ml/dk)	655	0,4	3,8	2,1	2,01
AST(IU/L)	655	6	202	48	35,17
ALT(IU/L)	655	8	182	45	29,68
CRP(mg/L)	655	0	508	12.62	30.63
HGB(gr/dl)	655	5.7	20.2	13.12	1.67
PLT(cell/ml)	655	3660	604000	272629	83359
RF(IU / mL)	600	0	1635	41.77	115.50

❖ WBC: white globe, Sedim: sedimentation, CRP: C-reactive protein, HGB: hemoglobin, PLT: platelet, RF: rheumatoid factor AST: aspart transaminase ALT: alanine transaminase

The most frequent reason for the patients to apply to the clinic was pain (extremity pain such as hand, feet, knee, and heel), which formed 83% of the applications. This was followed

by dry mouth-eye and consultations for chest diseases. The reasons for the patients to apply for the outpatient clinic are given in **Table 2**.

Table 2: Complaints of Patients to Apply to the Outpatient Clinic

APPLICATION COMPLAINTS	N	(%)
Pain	547	83.5
Dry Mouth And Eye	23	3.5
Consultations From The Chest Diseases Department	16	2.4
High Acute Phase Reactant	14	2.1
Consultations From The Eye Diseases Department	13	2
Raynoud's phenomenon	10	1.5
Oral And Genital Ulcers	6	0.9
High Fever	5	0.8
Proteinuria	5	0.8
Oral Ulcers	5	0.8
Runny Nose With Blood	3	0.5
Rash On Extremities	2	0.3
Erythema Nodosum	2	0.3
Malar Erythema	2	0.3
Cladicacy In The Extremities	1	0.2
Vision Loss	1	0.2
Total	655	100

The most prevalent complaint among the 547 patients with pain complaint was hand/wrist pain with 189 (34.6%) patients. This was followed by general body pain with 159 (29.1%) patients, and knee pain with 81 (14.8%) patients. The pain localization of the patients who applied with pain complaints is given in **Table 3**.

Table 3: Pain localization of the patients who applied with pain complaints

PAIN LOCALIZATION	N	%
Hand/Wrist Pain	189	34.6
General Body Pain	159	29.1
Knee Pain	81	14.8
Feet Pain	65	11.9
Back Pain	16	2.9
Shoulder Pain	15	2.7
Hip Pain	9	1.6
Abdominal Pain	4	0.7
Headache	3	0.5
Heel Pain	2	0.4
Elbow Pain	2	0.4
Neck Pain	2	0.4
Total	547	100

The diagnosis obtained based on physical examination, laboratory results and imaging methods revealed that the most prevalent diagnosis was osteoarthritis with 187 (28.6%) patients and rheumatoid arthritis with 152 (23.2%) patients. The diagnosis distribution for the patients is given in **Table 4**.

Table 4: Diagnosis distribution of the patients

DIAGNOSIS	N	%
Osteoarthritis	187	28.6
Rheumatoid Arthritis	152	23.2
Fibromyalgia	58	8.9
Gout	51	7.8
Sjögren's Sendyrome	34	5.2
Vasculitis	19	2.9
Ankylosing Spondylitis	19	2.9
No Rhematological Pathology Detected	16	2.4
Idiopatic Pulmonary Fibrosis	13	2.0
Lumbar Disc Hernia	12	1.8
Scleroderma	11	1.7
Behçets Disease	10	1.5
Psoriatic Arthritis	10	1.5
Carpal Tunnel Syndrome	8	1.2
Uveitis	7	1.1
Paraneoplastic Arthritis	6	.9
Systemic lupus erythematosus	6	,9
Diabetic Neuropathy	6	.9
Dish	5	.8
Mixed Connective Tissue Disease	5	.8
Hereditary Mediterranean Fever	4	.6
Cppd	4	.5
Other	3	.5
Lymphoma	2	.3
Charcot Arthropathy	2	.3
Polymialgy Romatica	2	.3
Total	655	100.0

When osteoarthritis was divided into subgroups, hand osteoarthritis was the most prevalent group with 71 (38%) patients. The joint retention distribution of osteoarthritis is given in **Figure 1**.
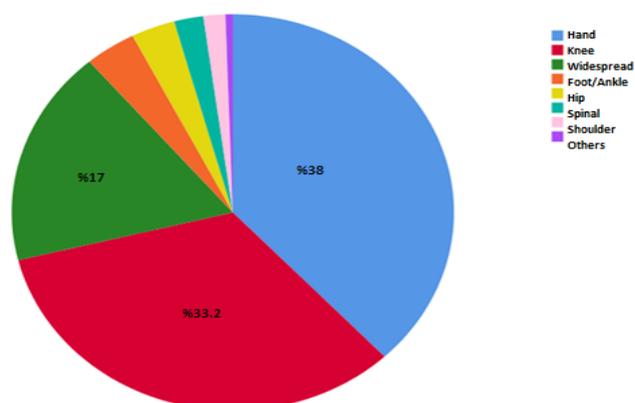

Figure 1: Distribution of osteoarthritis according to joint involvement

DISCUSSION

In our study, the complaint, age-gender distribution, laboratory results and diagnosis of geriatric patients who applied to the rheumatology outpatient clinic were evaluated. While the most prevalent application reason was osteoarthritis and fibromyalgia among non-inflammatory reasons, rheumatoid arthritis and gout arthritis

were the most prevalent complaints among inflammatory reasons. According to TÜİK data, 55.8% of the geriatric population in Turkey is female and 44.2% is male. Çakmak B. et al. conducted a study to reveal the musculoskeletal problems in geriatric patients and found that 72.2% were female and 27.7% were male among 60 years old and above patients included in the study (5). Yılmaz et al. evaluated rheumatology diseases in geriatric patients and 70% of the patients included in the study were female and 30% were male (6). In our study, the female population was higher than the male population similar to the related literature (70% female and 30% male). The high female ratio compared to the general population might be explained by the more prevalent musculoskeletal system and inflammatory diseases among women.

In our study, 83% of the patients applied to the outpatient clinic with extremity pain. There are different data in the literature regarding musculoskeletal pain localization. Tarsuslu Şimşek et al. investigated older patients in the home environment and found knee and back pains to be most prevalent in terms of pain localization (7). Miro et al. investigated 65 years old and above individuals with surveys and reported that 73% of the patients experienced pain and the most prevalent pain was joint pain (mainly lower extremities and back) (8). In our study, the most prevalent pain was hand/wrist pain, prevalent body pain and knee pain.

Osteoarthritis is a joint disease that occurs due to degeneration of the articular cartilage and its prevalence increases with age. Age is the first risk factor for osteoarthritis and 80% of the population over 60 years old experience radiological findings of osteoarthritis in at least one joint (9). Retention in the hand, knee and hip joints are more prevalent, especially after 50 years old (10). A study that investigated geriatric patients applied to physical therapy outpatient clinics due to musculoskeletal system problems revealed that 72% of these patients had degenerative joint diseases. The localization was 22% knee, 20% back and 10.4% neck pain. In our study, the most prevalent diagnosis in rheumatology outpatient clinic for geriatric patients was osteoarthritis with 28% of the patients.

The osteoarthritis joint retention distribution in our study is similar to the literature with 38% hand, 33% knee and 17.6% prevalent osteoarthritis. The fact that osteoarthritis is the most common musculoskeletal pathology among older patients may explain why it is the most common diagnosis in our outpatient clinic.

Fibromyalgia is one of the musculoskeletal pathologies characterized by widespread pain. In addition to pain, the patient might also apply to the outpatient clinic due to morning stiffness, non-soothing sleep, headache and muscle spasms. A study that investigated the fibromyalgia prevalence for the 60-85 age group found that fibromyalgia prevalence for individuals above 60 years old was 31% (11). In our study, 8.9% of the patients received a fibromyalgia diagnosis. The reason for this ratio to be low among our patients is that fibromyalgia patients apply to rheumatology, physical therapy and orthopedics outpatient clinics like osteoarthritis patients.

Rheumatoid arthritis is a chronic inflammatory arthritis that targets synovial tissues and it is the most prevalent inflammatory arthritis. In geriatric patients, it is reported that rheumatoid arthritis and crystal arthropathy are more prevalent than other inflammatory diseases (5). Rheumatoid factor (RF) is formed against the antigenic sites in the Fc part of the IgG molecule is autoantibody. Approximately 70-80% of patients with rheumatoid arthritis are seropositive. Yılmaz et al. investigated the problems for screening rheumatology diseases in the geriatric period and reported that rheumatoid arthritis was the most prevalent reason with 42.2% of the patients applying to the outpatient clinic. This diagnosis was followed by seronegative arthritis and crystal arthritis with 16.2% (6). Sertpoyraz et al. RF positivity was found to be around 70% in a study in which they compared the relationship between RF and Anti-Cyclic Citrullinated Peptide (Anti-CCP) in patients with rheumatoid arthritis (12). The findings of our study support the literature. In our study, RA was the second most prevalent diagnosis without inflammatory and non-inflammatory distinction and it was the most prevalent diagnosis reason among the inflammatory diseases. Gout was the 4th among all diagnoses and 2nd

among the inflammatory diseases. The prevalence of systematic lupus erythematosus and other connective tissue diseases decreased with menopause (13). In our study, SLE and other connective tissue diseases are among the last reasons for the diagnosis. As a result, while degenerative diseases were the most prevalent diseases among geriatric patients who applied to the rheumatology outpatient clinic, rheumatoid arthritis was the most prevalent disease among inflammatory rheumatoid diseases.

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