

A Study on the Geriatric Patients Applied to the Emergency Internal Medicine Service

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ABSTRACT

Objective: In parallel with the increase in the elderly population in our country as in the world, the rate of the patients applied to the emergency services has shown an increase. The present study aims to investigate the application reasons of the patients aged 65 and over who were followed up in our emergency internal medicine unit, to examine their current diseases, to treat their newly-emerging acute problems, and to evaluate their follow-up processes.

Methods: All patients aged 65 and over, who applied to the Emergency Internal Medicine Unit a tour hospital between October 2017 and December 2017, were retrospectively evaluated in this study. Gender, current disease, application reason and diagnosis (including ICD 10 codes) of the patients were recorded through their files. Applications were examined retrospectively through the hospital information system, and all data were entered into the program called SPSS 20.00 in the computer environment.

Results: The mean age of 310 geriatric patients aged 65 and over who were examined in this study was 76.6. The youngest age was 65 and the oldest age was 103. Furthermore, it was found that 149 (47.9%) of the patients were men, 161 (51.8%) of them were women, 129 (41.5%) of them were between the ages of 65 and 74, 133 (42.8%) of them were between the ages of 75 and 84, 48 (15.4%) of them were in the age of >85. The most common diseases were cardiovascular system diseases, gastrointestinal system diseases and urinary system diseases.

Conclusion: In our day, the rate of the elderly population applied to emergency services has increased. It has been found that the most common diseases are cardiovascular system diseases, gastrointestinal system diseases and urinary system diseases. In the first examination of the patients at hospitals, determination of the methods on diseases in accordance with their physical examination findings, anamnesis and medical treatment will be beneficial in terms of their life quality and survival.

INTRODUCTION

Geriatric patients need emergency service and intensive care more frequently than the normal population,^[1,2] and emergency service units are hospital entrance doors for the geriatric patients. Although the patients need special care and support, any sufficient service cannot be provided in emergency units.^[3] Aging is the distance every living thing covers in time.^[4] Gerontologists classify the old age as the young old (ages between 65 and 74), the middle old (ages between 75 and 84), and the old-old age (over age 85). The World Health Organization (WHO) had declared that people aged between 0 and 18 are considered as an adolescent, people aged between 18 and 65 are considered as young, people aged between 65 and 74 are considered as young-old, people aged between 74 and 84 are considered as old, and people aged 85 and over are

considered as very old.^[5] The human life has prolonged, and the elderly population in the world has continued to increase as the living conditions are improved, the accessibility to medical services is increased, and the medical care services are developed in our day. It has been estimated that the global population of elderly people, which is 600 million, will reach two billion in 2050^[6,7] and that the elderly people in Turkey constituted 8% of the population in 2013 will reach 10% in 2023.^[8]

It is important to evaluate the conditions of other clinics in planning the medical services to be provided for the elderly people to give a between service to the elderly population applied to the emergency service. The number of chronic diseases and related complications of the individuals increases with aging, and this affects mortality and morbidity. In our study, it is aimed to evaluate the complaints of the geriatric patients applied to our hospital

and followed in the emergency internal medicine unit, to determine their acute-chronic diseases, to regulate their necessary treatments, and to plan their medical follow-up processes.

MATERIALS AND METHODS

After this study was approved by the ethical committee, the study data between October 2017 and December 2017 were received from the emergency service records. The patients were examined by the internal medicine specialists, and their diagnoses were determined in accordance with the ICD-10 codes. This study was conducted retrospectively in accordance with the ICD-10 codes in the program called "Octomed", which is the information management system of the hospital. Age, gender, application reasons and chronic diseases of the geriatric population were recorded. The participants were categorized according to the age groups as the age between 65 and 74 (young-old), the age between 75 and 84 (middle-old), and the age 85 and over (old-old). As the patients had recurrent applications, the diagnoses in their first application were considered. The research data were analyzed in the packaged program called SPSS 20.00. The Chi-Square Test was used in the analysis of the data determined through frequency, percentage and count. A written approval from the relevant institution and 31/10/2018 dated and 2018/514/140/4 ethical committee approval from the Ethical Committee of our hospital was received for this study.

RESULTS

Medical complaints of the patients applied to the emergency internal medicine polyclinic were examined retrospectively through the hospital information system in this study. It was found that the average age of 310 geriatric patients was 76.6; the youngest age was 65 and the oldest age was 103. 78 (25.7%) of the patients (38.4% of them were men, and 61.6% of them were women) applied to the hospital due to weakness, 36 (11.60%) of the patients (52.7% of them were men, and 47.3% of them were women) applied to the hospital due to difficulty in breathing, 36 (11.6%) of the patients (46.1% of them were men, and 53.9% of them were women) applied to the hospital due to abdominal pain, 26 (8.4%) of the patients (56.5% of them were men, and 43.5% of them were women) applied to the hospital due to changes in consciousness, and 17 (5.5%) of the patients (53.3% of them were men, and 46.7% of them were women) applied to the hospital due to black stool. In descending order, there were diarrhea, nausea, vomit, lack of appetite, distension, and fever (Figs. 1, 2).

When our geriatric patients were examined, it has been found that 55 (17.7%) of the patients (40% of them were men, and 60% of them were women) applied to the hospital due to anemia, 51 (16.4%) of the patients (50.9% of them were men, and 49.1% of them were women) applied to the hospital due to acute renal failure, 39 (12.5%)

of the patients (33.3% of them were men, and 66.7% of them were women) applied to the hospital due to electrolyte disorder, 27 (8.7%) of the patients (40.7% of them were men, and 59.3% of them were women) applied to the hospital due to congestive cardiac failure, 23 (7.4%) patients (36.3% of them were men, and 63.7% of them were women) applied to the hospital due to gastrointestinal hemorrhage, and 16 (5.1%) of the patients (43.7% of them were men, and 66.3% of them were women) applied to the hospital due to chronic renal failure. Furthermore, these patients had another diagnoses, such as malignancy, ascites, diabetes and diabetes complications, and acute pancreatitis (Figs. 3, 4).

In this study, 71 (55%) of 129 patients aged between 65 and 74, who were included were men, and 58 (45%) of them were women. 33 (25.6%) of 129 patients applied to the hospital due to weakness. 16 (12.40%) of the patients applied to the hospital due to difficulty in breathing, and 11 (8.5%) of them applied to the hospital due to abdominal

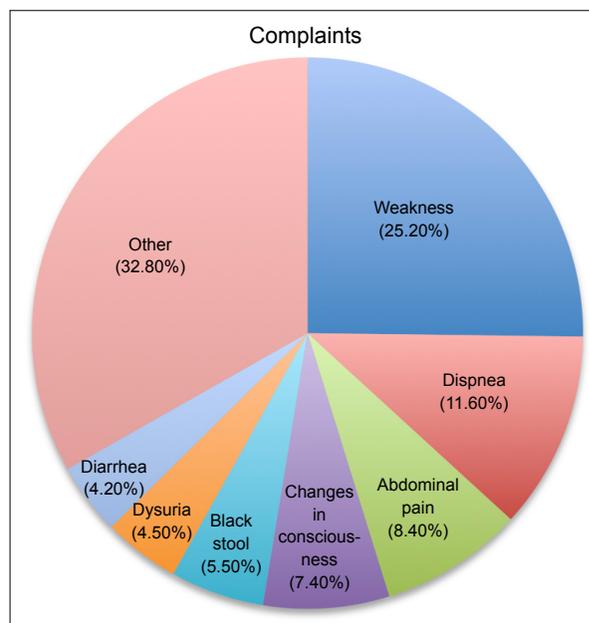


Figure 1. Medical complaints of the patients applied to the emergency internal medicine polyclinic.

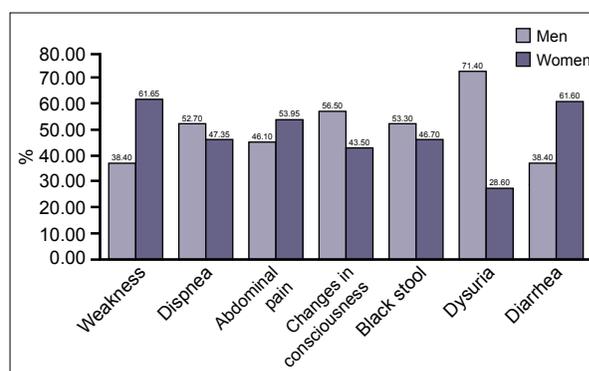


Figure 2. Medical complaints of the patients applied to the emergency internal medicine polyclinic by gender.

pain. 22 (17.1%) of the patients were diagnosed with anemia, 17 (13.2%) of them were diagnosed with acute renal failure, and 13 (10.1%) of them were diagnosed with gastrointestinal hemorrhage when they applied to the hospital.

63 (47.4%) of 133 patients aged between 75 and 84 were men, and 70 (52.6%) of them were women. 31 (23.3%) of 133 patients applied to the hospital due to weakness. 16 (12%) of the patients applied to the hospital due to difficulty in breathing, and 12 (9%) of them applied to the hospital due to changes in consciousness. 26 (19.5%) of these patients were diagnosed with anemia, 22 (16.5%) of them were diagnosed with acute renal failure, and 18 (13.5%) of them were diagnosed with electrolyte disorder when they applied to the hospital.

15 (31.3%) of the 48 patients aged 85 and over were men, and 33 (68.8%) of them were women. 14 (29.2%) of 48 patients applied to the hospital due to weakness. Five (10.4%) of these patients applied to the hospital due to reduced urine volume, and four (8.3%) of them applied

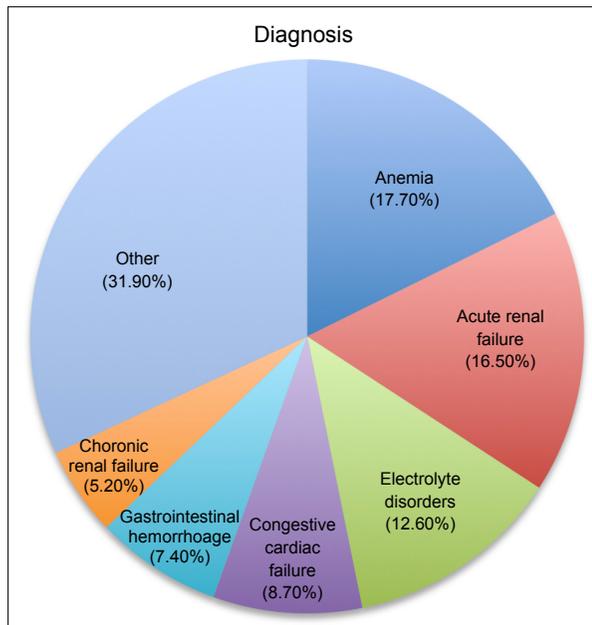


Figure 3. Diagnoses of the patients applied to the emergency internal medicine polyclinic.

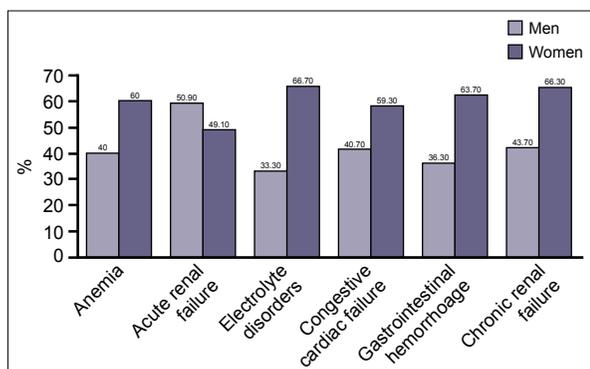


Figure 4. Diagnoses of the patients applied to the emergency internal medicine polyclinic by gender.

to the hospital due to abdominal pain. 12 (25%) of these patients were diagnosed with acute renal failure, and 7 (14.6%) of them were diagnosed with anemia when they applied to the hospital.

DISCUSSION

The aim of the main geriatric approach is to increase the functionality and cognitive functions of a geriatric patient with many complicated medical problems and to decrease mortality.^[9] As the elderly population increases rapidly, it is important that emergency services provide geriatric patients with medical care and support. In the study of the National Center for Health Statistics (NCHS), it was found that 31.4% of the geriatric patients applied to the emergency service consist of the people aged between 65 and 74, and 55.8% of them consist of the people aged 75 and over.^[9] Medical emergency applications show an increase due to the increasing medical comorbidities in the old age, and the geriatric patients apply to the emergency services more frequently than the young.^[1,10] In the studies conducted on the geriatric patients in the literature, it has been found that females, whose average life expectancy is longer, apply to the emergency services more frequently.^[11] Similarly, in our study, it has been found that the females apply to the emergency services more frequently than the males. An increase in the incidence of many chronic diseases with age is natural, and their self-care at home may be difficult.

In the study conducted by Kecek et al.,^[12] when the medical complaints of the patients hospitalized in various clinics are examined, different cardiac symptoms (n=591), weakness and general condition disorder (n=243) and pain (n=225) have been determined as the most common medical complaints made by the patients when they applied to the hospital. In the study conducted by Loğoğlu et al.,^[13] it has been observed that medical complaints of the geriatric patients applied to the emergency service are respectively difficulty in breathing (24.6%), chest pain (16.4%), and abdominal pain (16.1%). In the study conducted by Demirçan et al.,^[14] medical complaints of the patients in the emergency internal medicine unit are respectively chest pain (13.1%), difficulty in breathing (11.6%), and changes in consciousness (6.6%). In our study, it has been found that 25.7% of the geriatric patients applied to the hospital due to weakness, 11.6% of them applied to the hospital due to difficulty in breathing, 11.6% of them applied to the hospital due to abdominal pain and that 8.4% of them applied to the hospital due to changes in consciousness.

In the study conducted by Kecek et al.,^[12] the most common diagnoses of the patients in the emergency internal medicine unit have been determined as various infections (n=785, 11.6%), acute coronary syndrome (n=462, 6.8%), intoxications (n=417, 6.2%), and noninfectious oncologic and hematologic malignancy (n=358, 5.3%). In descending order, there are cerebral vascular accidents, various arrhythmias, cardiac insufficiency, renal failure, chronic obstructive pulmonary disease, and gastrointestinal hemor-

rhage. Infectious diseases are among the most common medical complaints of the patients; as such diseases may affect all internal organs and systems. In our study, 55 (17.7%) of the patients were diagnosed with anemia, 51 (16.4%) of the patients were diagnosed with acute renal failure, 39 (12.5%) of the patients were diagnosed with electrolyte disorder, 27 (8.7%) of the patients were diagnosed with congestive cardiac failure, 23 (7.4%) of the patients were diagnosed with gastrointestinal hemorrhage, and 16 (5.1%) of the patients were diagnosed with chronic renal failure. Furthermore, these patients had another diagnoses, such as malignancy, ascites, diabetes and diabetes complications, and acute pancreatitis.

The risk of impairment and chronic disease shows an increase in geriatric patients.^[10,15] Most of the patients need to be transferred by ambulance, and these patients are usually directed by their family physicians to the hospitals abroad.^[3,16–18] In our country, various studies on the first-line treatment approaches for geriatric patients have been continued.^[19] In the light of these studies, the development of unique strategies on the transfer of the geriatric patients from their home to the hospital, care in the emergency service, and follow-up nursing at home will be beneficial. In our country, there are home health care services provided by the Ministry of Health, and the geriatric age group has been provided with various beneficial services for the last five years.

Ever-increasing life expectancy causes an increase in the number of patients in the geriatric age group. Understanding the possible reasons for morbidity and mortality in this group has become more and more important for clinicians. As it has been determined in our study, most patients apply to the hospital due to weakness, difficulty in breathing and abdominal pain, and the most common diagnoses are anemia, acute renal failure and electrolyte disorder. In the light of these findings, when symptoms, such as weakness, difficulty in breathing and abdominal pain are observed in the geriatric patients, caution should be exercised, and comorbid diseases frequently seen in most of these patients should be considered.

When the services provided for the patients in the geriatric group in the emergency services and the ever-increasing number of the application are considered, the importance and necessity of the specialized geriatric emergency services are seen. This issue has begun to be discussed, and it will be more on the agenda in the future.^[20]

Ethics Committee Approval

Approved by the local ethics committee.

Informed Consent

Retrospective study.

Peer-review

Internally peer-reviewed.

Authorship Contributions

Concept: A.C.I., G.G., E.T.A., S.A.; Design: A.C.I., G.G., E.T.A., S.A.; Supervision: A.C.I., G.G., E.T.A., S.A.; Fund-

ings: A.C.I., G.G., E.T.A.; Materials: A.C.I., G.G., E.T.A.; Data: A.C.I., G.G., E.T.A.; Analysis: A.C.I., G.G.; Literature search: A.C.I., S.A.; Writing: A.C.I., G.G.; Critical revision: A.C.I., G.G.

Conflict of Interest

None declared.

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Acil İç Hastalıkları Kliniğine Başvuran Geriatrik Hastaların İrdelenmesi

Amaç: Dünya genelinde olduğu gibi ülkemizde de yaşlı nüfusun artışına paralel olarak acil servis başvuru oranı da artış göstermektedir. Çalışmamızda acil dahiliye ünitemizde takip ettiğimiz 65 yaş ve üzeri hastaların başvuru nedenlerinin tespiti, mevcut hastalıklarının kontrolü, yeni gelişen akut problemlerin tedavisi ve takiplerinin değerlendirilmesi amaçlandı.

Gereç ve Yöntem: Sağlık Bilimleri Üniversitesi Kartal Dr. Lütfi Kırdar Eğitim ve Araştırma Hastanesi Acil Dahiliye Ünitesi'ne Ekim 2017–Aralık 2017 tarihleri arasında başvuran tüm 65 yaş ve üzeri hastalar geriye dönük olarak değerlendirmeye alındı. Hastaların dosyalarından cinsiyetleri, mevcut hastalıkları, başvuru nedenleri, tanıları (ICD 10 kodları alınmıştır) kaydedildi. Başvurular geriye dönük olarak hastane bilgi işlem sistemi üzerinden incelendi, tüm veriler bilgisayar ortamında SPSS ver. 20.00 programında değerlendirildi.

Bulgular: Çalışmaya alınan 65 yaş ve üzeri 310 geriatrik hastanın yaş ortalaması 76.6; en küçüğü 65, en büyüğü 103 yaşında idi. Hastaların 149'u (%47.9) erkek; 161'i (%51.8) kadın ve yaş aralığı; 65–74 yaş 129 (%41.5) kişi, 75–84 yaş 133 (%42.8) kişi, 85 yaş üzeri 48 (%15.4) kişi olarak izlendi. En sık tespit edilen hastalıklar kardiyovasküler sistem, gastrointestinal sistem ve üriner sistem hastalıkları idi.

Sonuç: Günümüzde acil servislere yaşlı nüfus başvuru oranı artmaktadır. En sık görülen hastalıklar kardiyovasküler sistem, gastrointestinal sistem ve üriner sistem hastalıkları olarak bulunmuştur. Hastanelerde hastaların ilk değerlendirilmesinde; başvuru şikayetleri, kronik hastalıkları, kullandıkları tıbbi tedavi ile öykü ve fizik muayene bulgularının da eklenerek hastalıklarının yönetiminin planlanması yaşam kalitesi ve sağkalımları açısından faydalı olacaktır.

Anahtar Sözcükler: Acil başvuru; geriatri; yaşlı hasta.