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ORIGINAL ARTICLE / ОРИГИНАЛНИ РАД

Hospitalization characteristics of patients with glaucoma in Central and West Serbia

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SUMMARY

Introduction/Objective Glaucoma is a chronic disease that impairs the optic nerve irreversibly and can lead to serious loss of vision and blindness. As the most frequent out of all, primary open-angle glaucoma has a worldwide incidence of 2.4 million.

The objective of this article is to examine the characteristics of glaucoma hospitalization patterns in Central and West Serbia in the 2006–2017 period.

Methods This study was a retrospective analysis of glaucoma hospitalizations in the Kragujevac Clinical Center from 2006 to 2017 (n = 1,751). All hospitalizations were divided according to discharge diagnoses into the following three subgroups: primary open-angle glaucoma, the primary closure glaucoma, and secondary glaucoma and other glaucoma types.

Results The average hospitalization rate for glaucoma is 5/10,000 inhabitants. The lowest rate was recorded in 2013 (1.8/10,000) and the highest in 2015 (9.3/10,000). The rehospitalization rate ranged from 0.5/10,000 in 2013 to 6.9/10,000 in 2015, with an average of 2.4 patients per 10,000. The most common glaucoma was secondary glaucoma and other glaucoma types (44.6%), followed by primary open-angle glaucoma (37.9%) and primary closure glaucoma (17.5%). The average hospitalization length was 6.5 ± 4.9 days and it decreased from the average 9.7 ± 6.5 (2006) to 5.5 ± 3.7 days (2013) ($p < 0.01$) in all glaucoma types.

Conclusion There was a significant reduction of the hospitalization length in all glaucoma types in Central and West Serbia. The hospitalization rates varied with a significant increase since 2013, which is the consequence of the increase in rehospitalization rates.

Keywords: primary open-angle glaucoma; primary closed-angle glaucoma; secondary glaucoma; hospitalization

INTRODUCTION

Glaucoma is a chronic disease that impairs the optic nerve irreversibly and can lead to serious loss of vision and blindness. After cataract, it is the second leading cause of blindness worldwide and is one of the leading causes of preventable blindness [1, 2]. It is estimated that by 2020, about 79.6 million people in the world will have glaucoma and more than 11 million will be consequently bilaterally blind [3]. The annual incidence of primary open-angle glaucoma (POAG) worldwide is 2.4 million. The prevalence of blindness in all types of the disease has been estimated at 5.2 million with three million cases with POAG. POAG is thus a complex and significant public health problem [4].

The two most common clinical forms of glaucoma are POAG and primary angle-closure glaucoma (PACG) [5]. Glaucoma is an asymptomatic disease in many patients. Patients do not know that they have glaucoma because progressive visual field loss is peripheral and typically asymmetric. This allows for overlapping and the compensation from the less damaged visual field of the other eye. Visual field defects can be detected at parametric tests only after 30% of retinal ganglion cells have been lost. The risk factors for POAG include old age, black race, glaucoma family history, diabetes mellitus, arterial blood pressure variations, myopia, and hypermetropia [6–9]. Glaucoma diagnostics requires a detailed clinical examination of the optic nerve and a functional analysis/evaluation of the patient's field of vision. Early treatment of glaucoma patients reduces the risk of progressive damage of a vision field. The prognosis depends on an early diagnosis and adequate treatment, as well as the patient's understanding of his own condition and what comes with the disease [10]. The Preventive Services Task Force in the United States concluded that there was no insufficient evidence on the potential benefits of glaucoma screening at the level of primary health care (prevention of blindness) [11].

The objective of this article is to assess the glaucoma hospitalization reports in the Central and West Serbia regions during the period from 2006 to 2017.

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METHODS

The study was based on hospitalization reports from the Clinical Center of Kragujevac providing data on medical treatment for patients coming from Central and West Serbia, in accord with standards of the institutional committee on ethics. From 2006 to 2017, 1,751 persons were hospitalized for glaucoma treatment. The glaucoma was defined according to the 10th Revision of the International Classification of Diseases: Eyelid Eye Disorders, Lacrimal System and Orbit Disorders (H00–H06). All hospitalized patients were divided according to the major cause of the disease into three subgroups. The first subgroup includes the hospitalized patients discharged with the diagnosis of POAG (H40.1), while the second subgroup was discharged with PACG (H40.2). The third subgroup, named "glaucoma secundaria and other glaucoma (OG)," included patients with congenital glaucoma, glaucoma caused by drugs, injuries and/or other illnesses – H40.3, 4, 5, 6, 8, 9, and H42. Having analyzed the disease trends, the authors decided to focus their research on three intervals within the research period: 2006–2010, 2011–2013, and 2014–2017.

The data from hospitalization reports were entered into a Microsoft Access (Microsoft Corporation, Redmond, WA, USA) database. The data included basic demographic characteristics of the patients, the number and length of their hospitalizations, additional comorbidities, and rehospitalization periods.

The data were analyzed applying the methods of descriptive and analytic statistics. The techniques of descriptive statistics included mean values, variability measures, and structure indicators (percentage). The χ^2 test, i.e. Student's t-test, was used for assessing the significance of categorical data frequency, while one-way ANOVA test was applied for continual data. The statistical significance was selected at $p \leq 0.05$. The data was processed in SPSS, version 20.0 (IBM Corp., Armonk, NY, USA).

RESULTS

Basic sample characteristics

During the 2006–2017 period, the Clinical Center of Kragujevac recorded 634,206 hospitalized patients, out of which 14,217 (2.2%) were admitted at the Department of ophthalmology. Glaucoma, as the discharge diagnosis, was present in 2.2% (n = 1,751) of ophthalmology hospitalized patients. The average frequency of glaucoma patients was 5/10,000 inhabitants for the given time period. The lowest rate was in 2013 (1.8/10,000 inhabitants) and the highest in 2015 (9.3/10,000 inhabitants). The rehospitalization rate of glaucoma patients moved from 0.5/10,000 inhabitants in 2013 to 6.9/10,000 in 2015, with the average value being 2.4/10,000 inhabitants. The average age of hospitalized patients was 68.6 ± 12.4 years. Both sexes were almost equally affected (50.5% male and 49.5% female patients). The difference between the sexes was not statistically significant ($t = -0.18$, $df = 941$, $p > 0.05$). The average hospitalization length was 6.5 ± 4.9 days (the range was 1–35 days) and it actually decreased from the average of 9.7 ± 6.5 days recorded in 2006 to 5.5 ± 3.7 days in 2013 ($F = 18.41$, $df = 11$, $p < 0.01$) in all glaucoma types. Comorbidities were present in 120 cases. One additional comorbidity was detected in 51 cases, two in 69 cases, and three or more comorbidities in 20 cases. The comorbidities most frequently originated from vascular system disorders. The most prevalent were OG glaucoma (44.6%), followed by POAG (37.9%), and PACG (17.5%). The analysis of the number of hospitalized patients in all three glaucoma types over the selected time period has revealed that there are some differences between them, but not of statistical significance ($p > 0.05$, Figure 1).

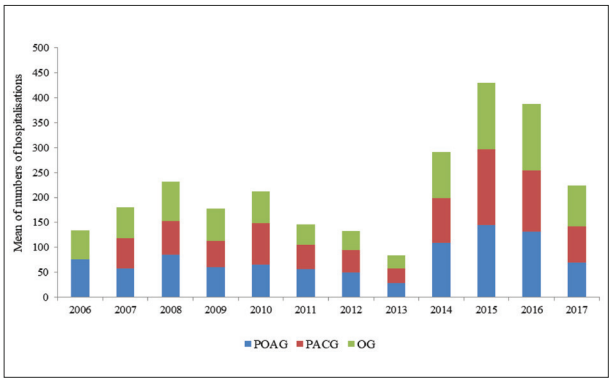

Figure 1. Hospitalization by type of glaucoma, Central and West Serbia, 2006–2017

Basic hospitalization characteristics with respect to glaucoma type

During the 2006–2010 time period, one half of the patients were diagnosed with POAG and they were on average one or two years older than those hospitalized for OG and PACG. Every third male and every fifth female patient were diagnosed with POAG. The hospitalization length was the shortest for those suffering from PACG. One third of all hospitalization periods were actually rehospitalizations. Comorbidities were present in 2% of hospitalizations. During the 2011–2013 period, an overall decreasing trend in glaucoma hospitalizations was recorded. The most prevalent discharge diagnosis was OG, present in 41.3% of cases. The male patients were most commonly hospitalized because of POAG, while the female patients as a result of PACG and OG. In comparison to the previous time period, the number of hospital days increased only in PACG patients. The highest number of rehospitalizations was recorder among OG patients.

From 2014 to 2017, the number of hospitalizations increased due to an increase of rehospitalizations (Figure 2).

OG was the leading cause of hospitalizations and it was a discharge diagnosis in almost every fourth patient of both sexes. The average length of hospitalization decreased from 6.4 to 5.1 days. Comorbidities were present in 12.3% of all hospitalizations (Table 1).

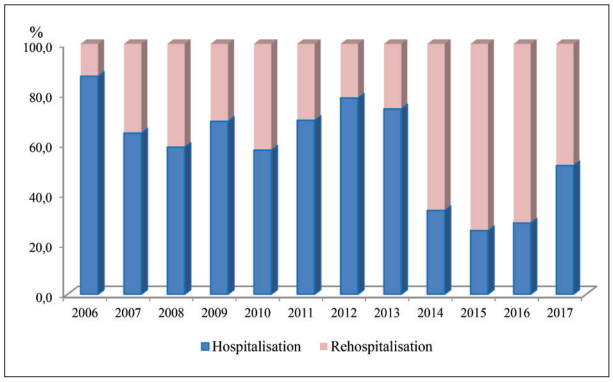

Figure 2. Hospitalization and rehospitalization, Central and West Serbia, 2006–2017

Tabele 1. Hospitalization characteristics of patients with glaucoma, Central and West Serbia, 2006–2017

Variables	2006–2010				2011–2013				2014–2017			
	POAG	PACG	OG	p	POAG	PACG	OG	p	POAG	PACG	OG	p
n (%)	341 (50.1)	57 (8.4)	282 (41.5)	< 0.01	81 (34.2)	58 (24.5)	98 (41.3)	< 0.01	241 (28.9)	191 (22.9)	402 (48.2)	< 0.01
Age (mean ± sd)	69.2 ± 10.4	66.9 ± 16.4	68.4 ± 12.1	> 0.05	70.7 ± 11.1	67.7 ± 14.2	66.4 ± 12.8	> 0.05	71.2 ± 9.8	70.4 ± 9.9	70.5 ± 11.5	> 0.05
Male	212 (31.2)	16 (2.4)	126 (18.5)	< 0.01	49 (20.7)	17 (7.2)	56 (23.6)	< 0.01	118 (14.1)	67 (8)	209 (25.1)	< 0.01
Female	129 (19)	41 (6)	156 (22.9)		32 (13.5)	41 (17.3)	42 (17.7)		123 (14.7)	124 (14.9)	193 (23.1)	
Hospital days (mean ± sd)	8.2 ± 6.1	6.9 ± 3.6	8.5 ± 5.8	> 0.05	5.9 ± 4.5	7.2 ± 6.1	6.3 ± 4.5	> 0.05	4.7 ± 3.3	5.5 ± 3.8	5.2 ± 3.7	< 0.05
Rehospitalizations (n, %)	99 (14.6)	17 (2.5)	105 (15.4)	< 0.01	15 (6.3)	16 (6.8)	31 (13.1)	> 0.05	182 (21.8)	141 (16.9)	240 (28.8)	< 0.01
Comorbidities (n, %)	7 (1)	3 (0.4)	4 (0.6)	> 0.05	1 (0.4)	/	/	> 0.05	36 (4.3)	20 (2.4)	47 (5.6)	< 0.01

POAG – open-angle primary glaucoma; PACG – primary angle-closure glaucoma; OG – glaucoma secundaria and other glaucoma

Basic hospitalization characteristics with respect to glaucoma type: 2006–2010 *vs*. 2011–2013

The number of POAG hospitalizations decreased significantly in the course of 2010 ($\chi^2 = 160.24$, df = 1, $p < 0.01$). This correlates with the decreasing number of rehospitalizations ($\chi^2 = 3.78$, df = 1, $p = 0.05$). The hospitalized patients were in 60% of cases males of similar age. During the given time frames, there was a statistically significant decrease in the average number of hospital days from 8.2 to 5.9 ($t = 3.87$, df = 156.6, $p < 0.01$). In most cases the comorbidities did not occur. The changes that occurred with hospitalized PACG patients were not statistically significant. The number of OG hospitalizations decreased significantly ($\chi^2 = 89.17$, df = 1, $p = 0.01$). Until 2010, there were more male patients, but from 2011 on, female patients started to prevail ($\chi^2 = 4.53$, df = 1, $p < 0.05$). The duration of stays in the hospital was reduced by two days on average ($t = 3.88$, df = 218.9, $p < 0.01$). The rehospitalization rates for OG were similar during both time intervals.

Basic hospitalization characteristics with respect to glaucoma type: 2011–2013 *vs*. 2014–2017

During this period, the number of POAG hospitalizations increased significantly ($\chi^2 = 79.51$, df = 1, $p < 0.01$). The length of hospitalizations was reduced ($t = 2.27$, df = 320, $p < 0.05$), but the rehospitalization rate increased ($\chi^2 = 82.93$, df = 1, $p < 0.01$), as well as the number of comorbidities ($\chi^2 = 11.19$, df = 1, $p < 0.05$). After 2013, the number of hospitalized PACG patients increased almost nine-fold ($\chi^2 = 40.83$, df = 1, $p < 0.01$), which is the main reason for the increase in the total number of PACG hospitalizations ($\chi^2 = 71.04$, df = 1, $p < 0.01$). During the same period, the average number of hospital days decreased from 7.2 to 5.5 days ($t = 1.94$, df = 70.93, $p = 0.05$), while the number of comorbidities increased.

The number of OG hospitalizations recorded from 2011 to 2013 increased significantly in the 2014–2017 period ($\chi^2 = 184.83$, df = 1, $p < 0.01$). The patients hospitalized after 2013 were on average four years older ($t = -3.12$, df = 498, $p < 0.05$). There was an increase in the number of hospitalized patients ($\chi^2 = 25.1$, df = 1, $p < 0.01$), but hospitalizations were shorter in duration ($t = 2.3$, df = 131.36, $p < 0.05$).

DISCUSSION

The average hospitalization rate of glaucoma patients in Kragujevac Clinical Centre in the 2006–2017 period was 4.9/10,000 inhabitants, while for Serbia the rate was lower – 2.8/10,000 inhabitants. This may be the result of the fact that the population of the Central and West Serbia regions gravitates towards Kragujevac Clinical Centre. In accordance with demographic changes, i.e. the increasing number of elderly people (age 65 and older) in the total population, the largest number of patients was registered in the geriatric population [12, 13].

During the given period, the total number of hospitalizations was fluctuating to a great extent, so we decided to divide this period into three time intervals: 2006–2010, 2011–2013, and 2014–2017. During 2006–2010, there was a mild decreasing trend in the number of glaucoma hospitalizations, while the number of rehospitalization increased almost three-fold. During the next time interval, both the number of hospitalizations and the number of rehospitalizations was almost halved. Since 2010, there was a significant increase in the number of rehospitalizations which contributed to an increase in the total number of hospitalizations. In 2006, the rate was one rehospitalization per seven hospitalizations, while 10 years later two rehospitalizations were registered for two hospitalizations. These results indicate that the number of newly diagnosed cases which require hospital treatment is decreasing.

Rehospitalized patients are actually chronic patients who do not manage to maintain intraocular pressure under control due to low compliance. This further suggests that there is a need for better education of patients, on one side, and more attention of doctors in the primary health care system, on the other.

In Central and West Serbia, the most common cases were OG glaucoma (44.6%), followed by POAG (37.9%) and PACG (17.5%). In Serbia in 2016, this order is the same, the most common being OG glaucoma (62.6%), followed by POAG (26.3%) and PACG (11.1%). In Central and West Serbia, POAG hospitalizations had a declining trend, while PACG and OG hospitalizations had increasing trends, more pronounced with PACG.

Similar research results were found in Africa and Asia. In Ethiopia, the most frequent cases are of exfoliate glaucoma (35.2%), POAG (32.8%), and PACG (18.5%) [14]. South-Central Asia is also projected to overtake East Asia in 2040 with the highest number of overall glaucoma cases and POAG burden, while PACG burden will remain the highest in East Asia [13].

The results have shown that the age of the patients increased regardless of the type of glaucoma, which is in accordance with the findings in other studies [14, 15, 16]. The sex analysis shows that women are at higher risk of PACG than men [17].

According to the experts' estimates with respect to population age, today in Serbia there are about 100 000 people with glaucoma and this number is expected to keep increasing. Unfortunately, there is no accurate data on the number of people with glaucoma since Serbia does not have an official register which should be introduced into the Law on Health Records, imposing an obligation to all institutions or healthcare professionals to conduct regular analyses. In the absence of such a registry, the data on the disease are partial since they are obtained from hospital records, disease history, reports of established illnesses and conditions, etc. American Academy of Ophthalmology Intelligent Research in Sight (IRIS) established this type of registry, being the first comprehensive clinical register of eye diseases. The Academy developed it as an integral part of the common goal of the profession to continuously improve the treatment of ophthalmologic diseases and glaucoma. Within this registry, visualization tools were developed, reports were prepared in the form of tables and charts (total number of diseases, demographic characteristics: by sex, age, ethnic group, type of glaucoma, disease progression, procedures, types of surgical interventions, health insurance) [18].

Holló et al. [19] as representatives of the European Glaucoma Association, pointed out that there are significant differences in the diagnosis, treatment and monitoring of glaucoma among European countries. The differences result from the different economic situations and the consequent financial ability to follow the recommendations and guidelines of the European Association of glaucomacologists [19, 20].

Studies indicate the importance of continuous education of patients, especially of the elderly and male population [21]. The analyses show that visual impairment caused by glaucoma affects the life quality of the patients, especially with less educated individuals [22, 23, 24]. The main goals of the glaucoma treatments are to preserve the visual functions of patients and to preserve/increase their life quality [25, 26, 27].

CONCLUSION

In Central and West Serbia there was a significant reduction of the length of hospital stay among patients with all glaucoma types during the researched time period. The hospitalization rates varied, but since 2013 there was a significant increase of hospitalizations which contributed to the overall increase of this rate. These findings can be attributed to inadequate prevention, untimely diagnosis, and inadequate treatment at the level of primary health care. Glaucoma is a disease of public health significance, because it is a major burden on society in terms of morbidity, disability, quality of life, as well as direct and indirect costs. Adequate secondary prevention measures, i.e. screening, can prevent the onset of the disease, shorten the length of hospitalization, reduce the number of rehospitalization, improve the outcome of treatment and prevent complications and loss of vision. The number of people with disabilities is expected to continue to rise due to inadequate prevention and the changes in demographic structure, i.e. the aging of the population and consequent exposure to more numerous risk factors.

Conflict of interest: None declared.

REFERENCES

1. Gupta D, Chen PP. Glaucoma. Am Fam Physician. 2016; 93(8):668–74.
2. Peters D, Bengtsson B, Heijl A. Lifetime risk of blindness in open-angle glaucoma. Am J Ophthalmol. 2013; 156(4):724–30.
3. Quigley HA, Broman AT. The number of people with glaucoma worldwide in 2010 and 2020. Br J Ophthalmol. 2006; 90(3):262–7.
4. Gupta P, Zhao Di, Guallar E, Ko F, Boland MV, Friedman DS. Prevalence of Glaucoma in the United States: The 2005–2008 National Health and Nutrition Examination Survey. Invest Ophthalmol Vis Sci. 2016; 57(6):2577–85.
5. Cheng JW, Cheng SW, Ma XY, Cai JP, Li Y, Wei RL. The prevalence of primary glaucoma in mainland China: a systematic review and meta-analysis. J Glaucoma. 2013; 22(4):301–6.
6. Shaikh Y, Yu F, Coleman AL. Burden of undetected and untreated glaucoma in the United States. Am J Ophthalmol. 2014; 158(6):1121–9.
7. Zhou M, Wang W, Huang W, Zhang X. Diabetes mellitus as a risk factor for open-angle glaucoma: a systematic review and meta-analysis. PLoS One. 2014; 9(8):e102972.
8. Bowe A, Grünig M, Schubert J, Demir M, Hoffmann V, Pelc A, et al. Circadian variation in arterial blood pressure and glaucomatous optic neuropathy – a systematic review and meta-analysis. Am J Hypertens. 2015; 28(9):1077–82.
9. Jeong da W, Kook MS, Lee KS, Lee JR, Han S. Circadian pattern of intraocular pressure fluctuations in young myopic eyes with open-angle glaucoma. Invest Ophthalmol Vis Sci. 2014; 55(4):2148–56.
10. Mantravadi AV, Vadhar N. Glaucoma. Prim Care. 2015; 42(3):437–49.
11. Moyer VA; U.S. Preventive Services Task Force. Screening for glaucoma: U.S. Preventive Services Task Force Recommendation Statement. Ann Intern Med. 2013; 159(7):484–9.
12. Chan EW, Li X, Tham YC, Liao J, Wong TY, Aung T, et al. Glaucoma in Asia: Regional prevalence variations and future projections. Br J Ophthalmol. 2016; 100(1):78–85.
13. Lee JW, Wong BK, Yick DW, Wong IY, Yuen CY, Lai JS. Primary acute angle closure: Long-term clinical outcomes over a 10-year period in the Chinese population. Int Ophthalmol. 2014; 34(2):165–9.
14. Tenkir A, Solomon B, Deribew A. Glaucoma subtypes in Ethiopian clinic patients. J Glaucoma. 2013; 22(2):110–6.
15. Lee JW, Lai JS, Yick DW, Tse RK. Retrospective case series on the long-term visual and intraocular pressure outcomes of phacomorphic glaucoma. Eye (Lond). 2010; 24(11):1675–80.
16. Tham Y C, Li X, Wong TY, Quigley HA, Aung T, Cheng CY. Global prevalence of glaucoma and projections of glaucoma burden through 2040: a systematic review and meta-analysis. Ophthalmology. 2014; 121(11):2081–90.
17. Zhao Y, Fu JL, Li YL, Li P, Lou FL. Epidemiology and clinical characteristics of patients with glaucoma: An analysis of hospital data between 2003 and 2012. Indian J Ophthalmol. 2015; 63(11):825–31.
18. IRIS® Registry. American Academy of Ophthalmology. San Francisco, CA 94109. Available on: https://www.aao.org/iris-registry.
19. Holló G, Hommer A; Delivery of Glaucoma Care Committee of the European Glaucoma Society. The status of glaucoma diagnostics and care in Europe in 2015: a European survey. Eur J Ophthalmol. 2016; 26(3):216–20.
20. Varma R, Lee PP, Goldberg I, Kotak S. An Assessment of the Health and Economic Burdens of Glaucoma. Am J Ophthalmol. 2011; 152(4):515–22.
21. Kim YK, Jeoung JW, Park KH. Understanding the reasons for loss to follow-up in patients with glaucoma at a tertiary referral teaching hospital in Korea. Br J Ophthalmol. 2017; 101(8):1059–65.
22. Kuo YS, Liu CJ, Cheng HC, Chen MJ, Chen WT, Ko YC. Impact of socioeconomic status on vision-related quality of life in primary open-angle glaucoma. Eye (Lond). 2017; 31(10):1480–7.
23. Newlands SJ, Hoy BM. Glaucoma patient follow-up time at Waikato Hospital, New Zealand. Clin Exp Ophthalmol. 2018; 46(5):558–60.
24. Maake MM, Oduntan OA. Prevalence and causes of visual impairment in patients seen at Nkhensani Hospital Eye Clinic, South Africa. Afr J Prim Health Care Fam Med. 2015; 7(1):728.
25. Quaranta L, Riva I, Gerardi C, Oddone F, Floriano I, Konstas AG. Erratum to: Quality of Life in Glaucoma: A Review of the Literature. Adv Ther. 2016; 33(6):982.
26. Peters D, Heijl A, Brenner L, Bengtsson B. Visual impairment and vision-related quality of life in the Early Manifest Glaucoma Trial after 20 years of follow-up. Acta Ophthalmol. 2015; 93(8):745–52.
27. Jung KI, Park CK. Mental Health Status and Quality of Life in Undiagnosed Glaucoma Patients: A Nationwide Population-Based Study. Medicine (Baltimore). 2016; 95(19):e3523.

Карактеристике хоспитализације болесника са глаукомом у Централној и Западној Србији

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САЖЕТАК

Увод/Циљ Глауком представља хронично обољење које узрокује иреверзибилне промене оптичког нерва које доводе до озбиљног оштећења вида и слепила. Инциденција примарног глаукома отвореног угла, као најчешћег облика глаукома у свету, на годишњем нивоу износи 2,4 милиона. Циљ рада је сагледати карактеристике хоспитализација узрокованих глаукомом у Централној и Западној Србији у периоду 2006–2017. године.

Методе Ова студија је ретроспективна анализа хоспитализација узрокованих глаукомом у Клиничком центру Крагујевац у периоду 2006–2017. године ($n = 1751$). Све хоспитализације подељене су према основном узроку болести у три подгрупе: примарни глауком отвореног угла, примарни глауком затвореног угла, секундарни и остали глаукоми.

Резултати Просечна стопа хоспитализације болесника са глаукомом износила је 5/10 000 становника. Најнижа стопа забележена је 2013. године (1,8/10 000), а највиша у 2015. години (9,3/10 000). Стопа рехоспитализација услед глаукома кретала се од 0,5/10 000 у 2013. години до 6,9/10 000 у 2015. години, просечно 2,4/10 000. Најзаступљенији су секундарни и остали глаукоми (44,6%,), затим примарни глаукоми отвореног угла (37,9%) и примарни глаукоми затвореног угла (17,5%). Дужина хоспитализације опада код свих врста глаукома са просечних 9,7 ± 6,5 (2006) на 5,5 ± 3,7 дана (2013).

Закључак У Централној и Западној Србији бележи се значајан пад дужине хоспитализације код свих подгрупа глаукома. Стопа хоспитализације болесника са глаукомом варира, са значајним порастом од 2013. године, што је последица пораста стопе рехоспитализације.

Кључне речи: примарни глауком отвореног угла; примарни глауком затвореног угла; секундарни глауком; хоспитализација