

CHARACTERISTICS OF PATIENTS WITH MULTIPLE SCLEROSIS BY SEX

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Introduction. Multiple sclerosis (MS) is a chronic inflammatory demyelinating, neurodegenerative disease of the central nervous system, with an unknown etiology and complete treatment. Many studies have shown that the incidence of MS among women is 2-3.5 times higher in comparison with men. **The aim of the study** was providing the sex characteristics of patients diagnosed with MS in Azerbaijan. **Materials and methods of research.** During the study period (01.01.2013–31.12.2022), 1796 patients with MS were examined. Patients were divided into two comparison groups (Group I – men, 616 patients; Group II – women, 1180 patients). Share of patients by sex, age (at diagnosis, probable disease onset, and the end of the study), clinical course of MS, and deaths were investigated in the comparison groups. Statistical analysis was performed with χ^2 -Pearson and t-Student-Bonferroni tests, and the acquired statistical results were rechecked with the U-Mann-Whitney test. **Results and discussion.** 65.7% of the patients were women, and 34.3% were men. Male-to-female ratio was 1:1.92. 66.4% of patients were urban residents, while rural residents were 33.6%. Among women, urban residents (68.1±1.4%) prevailed men (63.0±1.9%), and this difference was statistically significant ($P<0.05$). The average age at diagnosis was 34.9±0.2 years (35.2±0.4 years in men; 34.7±0.3 years in women). At the time of presumed first attacks, the average age was 29.7±0.2 years (29.9±0.3 years in men and 29.6±0.2 years in women). During the study years, 43 patients died. The average age of death was 56.8±1.2 years (in men, 55.2±1.6; in women, 58.0±1.6) ($P>0.05$). After diagnosis of MS, the average life expectancy was 15.7±1.0 years (minimum life expectancy was 4 years, maximum was 40 years). The period between disease onset and the diagnosis of MS was on average 5.3±0.2 years in men and 5.2±0.1 years in women. The distribution of patients by 5-year age groups on the age of diagnosis showed that more incidence rate among men was in the 35-39 age group (20.1±1.6% of male patients) and among women in the 30-34 age group (20.8±1.2% of female patients). However, these indicators did not differ statistically ($P>0.05$). The most frequent clinical course was Relapsing Remitting MS in both sexes – 78.6±1.7% in men, 77.4±1.2% in women. Although CIS is more common in women (4.2±0.6%), the difference was not statistically significant ($P>0.05$). Other types of MS were found almost equally in both sexes. **Conclusion.** Extensive research on sex differences in MS can improve our understanding of the disease's pathophysiology and treatment. The findings lay the groundwork for future research into the sex-depending approach to the clinical course and treatment of MS.

Keywords: multiple sclerosis, sex differences, clinical case, age.

Introduction. Multiple sclerosis (MS) is an inflammatory, autoimmune disease of the central nervous system with an unknown etiology and complete treatment [14]. Many studies have shown that the incidence of MS among women is 2-3.5 times higher in comparison with men [4, 22, 30, 36]. Recently, the ratio of women and men in MS incidence has increased, which is explained by an increased incidence rate among women rather than a decrease in incidence rate among men [49]. The reason for this may be the interaction between genes and the environment or epigenetic factors [47]. In general, the majority of autoimmune diseases, up to 80%, are more common in women [32].

The gender factor affects not only the incidence of MS but also its clinical course, and the recent increase in the incidence rate of MS in women is related to the increased Relapsing Remitting MS in women. In the Primary Progressive MS, the ratio of women to men remains unchanged at 1:1, and the reason for this is not known [14]. Another study showed a slight predominance of the Primary Progressive MS in men [8]. While

the severity of MS is expressed in women by frequent occurrences of attacks [25], in men it is expressed by increased disability over time [8, 15, 41, 50].

On the other hand, mortality rate due to MS in male patients is higher than in females [29]. This may be related to the role of sex hormones in the course of MS or the impact of X-chromosome genes on the immune system independently of sex hormones [48]. Several studies have shown that MS manifests itself at an earlier age in women than in men [8, 35].

Taking into consideration the above, **the present study aimed** to provide the sex characteristics of patients diagnosed with MS in Azerbaijan.

Materials and methods of research. During the study, 1796 patients who were diagnosed with MS or whose diagnosis was repeatedly confirmed within 10 years (01.01.2013–31.12.2022) by a special expert commission at the Neurological Center of the Ministry of Health of the Republic of Azerbaijan located at the Republican Clinical Hospital named after academician M.Mirgasimov within the framework of the “State Program for the Treatment, Prevention and Control of

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Multiple Sclerosis” [1, 2, 3] were examined. Patients were divided into two comparison groups (Group I – men, 616 patients; Group II – women, 1180 patients). Share of patients by sex, age (at diagnosis, at the time of presumed first MS attack – at disease onset, and the end of the study), clinical course of MS, and deaths were investigated in the comparison groups. Statistical analysis was performed with χ^2 -Pearson and t-Student-Bonferroni tests, and the acquired statistical results were rechecked with the U-Mann-Whitney test. Hypothesis "0" was rejected when $p < 0.05$. Calculations were made in the SPSS-26 statistical package.

Research results. 65.7% of the patients included in the study were women, and 34.3% were men. Accordingly, the male-to-female ratio was 1:1.92. The average age of the patients at the time of the first visit was 36.9 ± 0.2 years. Compared to gender, no statistically significant difference was found in the average age of patients (37.2 ± 0.4 years in men; 36.7 ± 0.3 years in women) ($P > 0.05$) (Tab. 1). At the time of the first visit, the youngest patient was 15 years old, and the oldest patient was 70 years old. The average age at diagnosis was 34.9 ± 0.2 years (35.2 ± 0.4 years in men; 34.7 ± 0.3 years in women), the minimum age was 11 years, and the maximum age was 66 years (both indi-

cators were related to women). The minimum age at diagnosis in men was 16, and the maximum age was 63. The mean age at diseases onset, was 29.7 ± 0.2 years – 29.9 ± 0.3 years in men (minimum age 13, maximum age 53 years) and 29.6 ± 0.2 years in women (minimum age 11, maximum age 58 years), respectively. When the mean age at diagnosis and the mean age at the first attack were compared by sex, no statistically significant difference was found ($P > 0.05$).

During the study years, 43 patients died. The average age of death was 56.8 ± 1.2 years (in men, 55.2 ± 1.6 years; in women, 58.0 ± 1.6 years) ($P > 0.05$). Among women, the youngest of the patients who died was 41 years old, and the oldest was 71 years old (among men were 41 and 69 years old, respectively). After the diagnosis of MS, the average life expectancy of patients was 15.7 ± 1.0 years (minimum life expectancy was 4 years, maximum was 40 years). The average life expectancy of women was 17.2 ± 1.5 years, and although it was higher than that of men (13.7 ± 1.4 years), no statistically significant difference was found ($P > 0.05$) (Tab. 1). The minimum life expectancy after diagnosis was 4 years for men (6 years for women), and the maximum life expectancy of women was 40 years (22 years for men).

Table 1

Age indicators of patients with multiple sclerosis by sex (2013-2022, 1796 patients)

Göstərici		Müqayisə qrupu I		Müqayisə qrupu II		P _{χ²}
		n	%	n	%	
Cins	Qadın	254	66±2,4	926	65,6±1,3	0,899
	Kişi	131	34±2,4	485	34,4±1,3	
Yaşayış yeri	Şəhər	273	70,9±2,3	919	65,1±1,3	0,033*
	Kənd	112	29,1±2,3	492	34,9±1,3	
DS-in gedişinə görə formaları	KİS	3	0,8±0,4	64	4,5±0,6	<0,001*
	RRMS	216	56,1±2,5	1181	83,7±1,0	
	PPMS	13	3,4±0,9	12	0,9±0,2	
	SPMS	139	36,1±2,4	142	10,1±0,8	
	PRMS	14	3,6±1,0	12	0,9±0,2	
DS-in ilk həmləsi zamanı klinik əlamət	Görmə pozuntusu	134	34,8±2,4	465	33,0±1,3	0,495
	Kiçik çanaq orqanlarının disfunksiyası	52	13,5±1,7	256	18,1±1,0	0,032*
	Hissi pozuntular	142	36,9±2,5	572	40,5±1,3	0,194
	Hərəkəti pozuntular	177	46,0±2,5	625	44,3±1,3	0,557
	Beyincik simptomları	112	29,1±2,3	461	32,7±1,2	0,182
	Nitq pozuntusu	25	6,5±1,3	173	12,3±0,9	0,001*
	Bulbar simptomatika	238	61,8±2,5	832	59±1,3	0,312
	Digər əlamətlər	120	31,2±2,4	379	26,9±1,2	0,094

Note: M – mean; Me – mediana; ±m – standard error; Q1, Q3 – I və III quartiles;

Statistical significance of the difference: Pt – by t-Student-Bonferroni test; PU – by U-Mann-Whitney test; * – number of deaths – 43 patients.

The period between disease onset and the diagnosis of MS was on average, 5.3 ± 0.2 years in men and 5.2 ± 0.1 years in women. The minimum period between the first attack and diagnosis was 2 years, and the maximum period was 7 years.

66.4% of patients (1192 people) were urban residents, while rural residents were 33.6% (604 people). As it can be seen, the vast majority of

patients – 2/3 of them were urban residents. Among women, urban residents were $68.1 \pm 1.4\%$ (804 people) that prevailed men – $63.0 \pm 1.9\%$ (388 people), and this difference was statistically significant ($P < 0.05$) (Tab. 2). Accordingly, rural residents were more prevalent among men (228 people, $37.0 \pm 1.9\%$) than women (376 people, $31.9 \pm 1.4\%$) ($P < 0.05$).

Table 2

Sex distribution of patients with multiple sclerosis by place of residence (2013-2022, 1796 patients)

Place of residence	Sex				P_{χ^2}	P_U
	Male		Female			
	n	$P \pm mp, \%$	n	$P \pm mp, \%$		
Urban areas	388	$63,0 \pm 1,9$	804	$68,1 \pm 1,4$	0,028*	0,028*
Rural areas	228	$37,0 \pm 1,9$	376	$31,9 \pm 1,4$		

Note: n – absolute number; P – percentage, $\pm mp$ – standard error; Statistical significance of the difference: Pt – by t-Student-Bonferroni test; PU – by U-Mann-Whitney test; * – Hypothesis "0" was rejected.

The distribution of patients by 5-year age groups on the age of diagnosis showed that the peak age of incidence falls to the 30-34 and 35-39 age groups. 20.0 ± 0.9 and $19.0 \pm 0.9\%$ of patients were respectively diagnosed with MS in this age period. More incidence rate among men was in the 35-39 age group ($20.1 \pm 1.6\%$ of male patients) and among women in

the 30-34 age group ($20.8 \pm 1.2\%$ of female patients) (Tab. 3). However, these indicators did not differ statistically ($P > 0.05$). 71.6% of patients had MS in 25-44 age group, which was more than other age groups ($P < 0.01$). 72.1% of men and 71.4% of women had MS in these age groups. The share of patients over 55 years of age was $\leq 1.0\%$ (Tab. 3).

Table 3

Sex distribution of multiple sclerosis patients at the time of diagnosis by age groups (2013-2022, 1796 patients)

Age groups	Sex				P_{χ^2}	P_U
	Male		Female			
	n	m, %	n	m, %		
< 20 yaş	25	$4,1 \pm 0,8\%$	41	$3,5 \pm 0,5\%$	0,426	0,266
20-24 yaş	47	$7,6 \pm 1,1\%$	121	$10,3 \pm 0,9\%$		
25-29 yaş	106	$17,2 \pm 1,5\%$	192	$16,3 \pm 1,1\%$		
30-34 yaş	115	$18,7 \pm 1,6\%$	245	$20,8 \pm 1,2\%$		
35-39 yaş	124	$20,1 \pm 1,6\%$	217	$18,4 \pm 1,1\%$		
40-44 yaş	99	$16,1 \pm 1,5\%$	188	$15,9 \pm 1,1\%$		
45-49 yaş	64	$10,4 \pm 1,2\%$	124	$10,5 \pm 0,9\%$		
50-54 yaş	29	$4,7 \pm 0,9\%$	36	$3,1 \pm 0,5\%$		
55-59 yaş	6	$1,0 \pm 0,4\%$	9	$0,8 \pm 0,3\%$		
60-64 yaş	1	$0,2 \pm 0,2\%$	6	$0,5 \pm 0,2\%$		
≥ 65 yaş	0	–	1	$0,1 \pm 0,1\%$		

Note: n – absolute number; P – percentage, $\pm mp$ – standard error; Statistical significance of the difference: P_{χ^2} – by Pearson test; PU – by U-Mann-Whitney test.

Among the types of MS, the most common was Relapsing Remitting MS with $77.8 \pm 1.0\%$ ($P < 0.01$). Secondary Progressive MS with $15.6 \pm 0.9\%$ is in second place. Clinically isolated syndrome (CIS) accounted for $3.7 \pm 0.4\%$, and the least common

forms were primary progressive MS ($1.4 \pm 0.3\%$) and Progressive-relapsing MS ($1.4 \pm 0.3\%$). When comparing by sex, the most frequent clinical course was Relapsing Remitting MS in both sexes – $78.6 \pm 1.7\%$ in men, $77.4 \pm 1.2\%$ in women (Tab. 4).

Although CIS is more common in women (4.2±0.6%), the difference was not statistically sig-

nificant (P>0.05). Other types of MS were found almost equally in both sexes.

Table 4

Proportion of types of multiple sclerosis by sex (2013-2022, 1796 patients)

Types of MS by clinic course	Sex				P _{χ²}	P _U
	Male		Female			
	n	m, %	n	m, %		
Clinically Isolated Syndrom	17	2,8±0,7	50	4,2±0,6		
Relapsing Remitting MS	484	78,6±1,7	913	77,4±1,2		
Secondary Progressive MS	97	15,7±1,5	184	15,6±1,1	0,608	0,473
Primary Progressive MS	8	1,3±0,5	17	1,4±0,3		
Progressive-relapsing MS	10	1,6±0,5	16	1,4±0,3		

Note: n – absolute number; P – percentage, ±mp – standard error; Statistical significance of the difference: P_{χ²} – by Pearson test; P_U – by U-Mann-Whitney test.

Discussion. The results obtained during the study were compared with the results of a number of similar studies in other countries. It was found that the average age at diagnosis in Azerbaijan was 34.9±0.2 years (34.7±0.3 years in women; 35.2±0.4 years in men) and it was higher than the same age in China – 25.9 [12]; South Korea – 30.4 (2005-2010) [26]; Malaysia – 31 [44]; Pakistan – 27 [51]; Russia's Altai region – 28.5±9.9 [58], Yaroslavl region – 29.7±6.6 [59], Nizhny Novgorod region – 29.5±7.8 [52]; Tehran, the capital city of Iran – 29.02±8.6 (28.77±8.46 in women and 30.02±8.96 in men) [17] and Turkey – 26.7±8.4 (Sakarya, Kojaeli) [10]. These indicators were lower than the corresponding indicators in India – 38.3 [37]. The average age at diagnosis with Relapsing Remitting MS (37 years) and Primary Progressive MS (55 years) in Ireland was higher than the average age of patients in Azerbaijan (33.7±0.2 and 41.5±1.6 years, respectively) [36]. The results of a number of studies were close to our results: Hungary (34.5±10.64) [9]; South Korea (35.2 (1987-2004)) [31]; Thailand (33±12) [42]; Isfahan (33.1±9.5) [18] and the East Azerbaijan region of Iran, where Azerbaijani Turks live (33.4±8.9) [24].

The mean age at the time of probable first attack of MS – 29.7±0.2 [in men, 29.9±0.3 (13-53); in women, 29.6±0.2 (11-58)] was close to the average indicators of Central Black Sea region of Turkey – 29.3±7.6 (in women 29.33±7.5, in men 29.53±7.9) [5]; Edirne region – 29.2±8.5 [11]; Tehran – 27.53±8.25 (27.29±8.12 in women and 28.24±8.60 in men) [17] and mean indicators of Russia – 28.3-31.2 [54]. And were lower than Rostov region of Russia – 31.3±0.4 (4-58 years old

[55]; Maltepe region of Istanbul – 31.7±8.7 (30.9±8.1 in men, 32±9.0 in women) [46]; France (Lorraine) – 34.3±11.3 (5-74) [21]; Italy: 31.7±10.3 (5-71) [38], including Sicily – 32.9 years (34.2 years for women and 30.2 years for men) [23]. In Kuwait, the age of onset of the disease was lowest – 25.2 years [6].

In a multicenter retrospective study conducted in Italy, the average age at first attack in patients with Primary Progressive MS was 43.5±10.2 years [38], which is higher than the result obtained in our study (37.56±1.6 years).

The average age of MS patients as of 01.01.2023 is 41.5±0.2 (18-73) was lower than the indicators acquired in the studies in Moscow (44.3±12.7 years) [53]; Rostov (43.2±0.4, average duration of the disease – 11.6±0.3 years (6 months-38 years)) [55]; Bashkortostan (42.21±0.61-47.6±10.83 – 2014-2018) [56]; Karelia – 43.0±10.2 [57]; Germany – 44.2±11.5 years, average disease duration – 12.7±9.2 years [19]; Sweden – 52.6 (52.5 years in women, 52.9 years in men) [49] and in Hungary – 48.83±10.64, the average duration of the disease - 14.57±10.59 years [9]. In the Middle Black Sea region of Turkey – 38.2±10.9 [5]; in Sakarya and Kojaeli – 39.8±9.8 years, the average duration of the disease – 14.5±8.4 years [10]; in Edirne – 36.5±9.6 years, the average duration of the disease – 6.9±5.2 years [11]; in Tehran – 35.64±10.01 (35.48±9.9 in women and 36.98±10.05 in men) [17] the average age of patients was lower than our indicators. The average age of patients in the Maltepe region of Istanbul – 41±12.0 years (37±9.6 in men, 43±12.7 in women), and the average duration of the disease (9.8±7.8 years) [46] was close to the indica-

tors acquired in Azerbaijan.

The average age of death – 56.8 ± 1.2 (in men – 55.2 ± 1.6 ; in women – 58.0 ± 1.6) was lower in comparison with the results in England – 66 [45]; in France 66.6 ± 13.9 (68.2 ± 13.9 in women, 64.1 ± 13.5 in men) [20]; in the USA – 60.9 [40]; in Norway – 64 (Relapsing Remitting MS), 66 (Primary Progressive MS) [43]; in Sicily – 63 [39]; Canada – 76.7 (76.9 – Relapsing Remitting MS, 76.3 – Primary Progressive MS) [27], and was close to the results obtained in Denmark – 58.4 [28] and Austria – 57 [16]. The average age of death was higher than the indicator in the Rostov region of Russia (44.6 ± 4.6) [55].

In Italy, the average period between the first attack and diagnosis was 3.2 ± 5.0 years (0-39 years) [38]; in Sicily – 4.63 years (1-31 years) [23]; in Maltepe region of Istanbul – 1.9 ± 2.8 years [46]; in Iran – 16.73 ± 30.93 months (16.21 ± 29.40 months in women,

18.27 ± 35.93 months in men) [17]; in Germany – 3.4 years [19], which is lower than our indicators.

Incidence was highest among women aged 30-34, and lowest among men aged 35-39. Women are more likely to develop MS than men between the ages of 15 and 29 in Shandong Province, China [34]. In South Korea, the most common age group for MS in women was 25-29 years, and the most common age group in men was 35-44 years [13].

Conclusion. Based on the presented scientific work, a number of MS characteristics – onset of disease, clinical course, diagnosis, age of death, etc. were investigated in both sexes. Extensive research on sex differences in MS can improve our understanding of the disease's pathophysiology and treatment [14, 33]. The findings lay the groundwork for future research into the sex-depending approach to the clinical course and treatment of MS.

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XÜLASƏ

DAĞINIQ SKLEROZ XƏSTƏLƏRİNİN CİNSƏ GÖRƏ XARAKTERİSTİKASI

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Giriş. Dağınıq skleroz (DS) mərkəzi sinir sisteminin etiologiyası və tam müalicəsi məlum olmayan xroniki demielinizasiyaedici, neyrodegenerativ xəstəliyədir. Bir çox tədqiqatlar DS-lə xəstələnmənin qadınlar arasında kişilərlə müqayisədə 2-3,5 dəfə çox rast gəldiyini göstərmişdir. **Təqdim edilmiş məqalənin məqsədi** Azərbaycanda DS diaqnozu qoyulmuş pasiyentlərin cinsə görə xarakteristikasını vermək olmuşdur. **Tədqiqatın materialı və metodları.** Tədqiqat müddəti (01.01.2013–31.12.2022-ci illər) ərzində 1796 DS-li xəstə araşdırılmışdır. Xəstələr 2 müqayisə qrupuna bölünmüşdür (I qrup – kişilər, 616 xəstə; II qrup – qadınlar, 1180 xəstə). Müqayisə qruplarında xəstələrin cins, yaş (diaqnoz qoyulanda, ehtimal olunan ilk həmlə zamanı və tədqiqatın sonunda), DS-in klinik gedişi və ölüm hadisələrinə görə xüsusi çəkisi tədqiq edilmişdir. Statistik təhlil χ^2 -Pirson və t-Student-Bonferroni meyarları ilə aparılmış, alınmış statistik nəticələr U-Mann-Whitney meyarı ilə təkrar yoxlanılmışdır. “0” hipotezi $p < 0,05$ olduqda inkar edilmişdir. **Nəticələr və müzakirə.** Xəstələrin 65,7%-i qadın, 34,3%-i isə kişi olmuşdur. Kişi qadın nisbəti 1:1,92 təşkil etmişdir. Xəstələrin 66,4%-i şəhər, 33,6%-i isə kənd sakinləri olmuşdur. Qadınlar arasında şəhər sakinləri (68.1±1.4%) kişilər arasında şəhər sakinlərindən (63.0±1.9%) çoxluq təşkil etmişdir və bu fərq statistik dürrüst olmuşdur ($P < 0.05$). Diaqnoz qoyularkən xəstələrin orta yaşı 34,9±0,2 yaş (kişilərdə 35,2±0,4; qadınlarda 34,7±0,3) təşkil etmişdir. Ehtimal olunan birinci həmlə zamanı orta yaş 29,7±0,2 yaş təşkil etmişdir (kişilərdə 29,9±0,3 və qadınlarda 29,6±0,2). Tədqiqat illəri ərzində 43 xəstədə ölüm qeydə alınmışdır. Xəstələrin orta ölüm yaşı 56,8±1,2 yaş təşkil etmişdir (kişilərdə – 55,2±1,6 yaş; qadınlarda – 58,0±1,6 yaş) ($P > 0,05$). DS diaqnozu qoyulandan sonra xəstələrinin orta yaşama müddəti 15,7±1,0 il olmuşdur (minimal yaşama müddəti 4 il, maksimal – 40 il). İlk həmlə ilə diaqnozun qoyulması arasında olan dövr kişilərdə orta-

lama $5,3 \pm 0,2$ il, qadınlarda $5,2 \pm 0,1$ il olmuşdur. Xəstələrin diaqnoz yaşlarına görə 5 illik yaş qrupları üzrə bölgüsü göstərdi ki, kişilər arasında daha çox xəstələnmə 35-39 yaş qrupu (kişi xəstələrin $20,1 \pm 1,6\%$ -i), qadınlar arasında isə 30-34 yaş qrupu (qadın xəstələrin $20,8 \pm 1,2\%$ -i) arasında olmuşdur. Lakin bu göstəricilər statistik dürüst fərqlənməmişdir ($P > 0,05$). DS-in klinik gedişinə görə tipləri arasında hər iki cinsdə ən çox rast gəlinən residivverən DS olmuşdur kişilərdə $78,6 \pm 1,7\%$, qadınlarda $77,4 \pm 1,2\%$, KİS daha çox qadınlarda rast gəlinmə $4,2 \pm 0,6\%$, fərq statistik dürüst olmamışdır ($P > 0,05$). DS-in digər subtipləri hər iki cinsdə demək olar ki eyni rast gəlinmişdir. **Yekun.** DS zamanı cinsdən asılı fərqlərin geniş tədqiqi DS-in patofizioloiyası və müalicəsi haqda bilikləri daha da artırır. Əldə edilən nəticələr DS-in klinik gedişi və müalicəsinə cinsdən asılı yanaşmanın daha da geniş tədqiq edilməsi üçün əsas verir. **Açar sözlər:** dağınıq skleroz, cinsə görə fərqlər, klinik gediş, yaş.

РЕЗЮМЕ

ХАРАКТЕРИСТИКА БОЛЬНЫХ РАССЕЯННЫМ СКЛЕРОЗОМ ПО ПОЛУ

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Введение. Рассеянный склероз РС является хроническим воспалительным демиелинизирующим, нейродегенеративным заболеванием ЦНС, с неизвестной этиологией и невозможностью полного излечения. Многие исследования показали, что заболеваемость РС среди женщин в 2-3,5 раза выше по сравнению с мужчинами. **Целью исследования** было определение половых характеристик пациентов с диагнозом РС в Азербайджане. **Материалы и методы исследования.** За период исследования (01.01.2013–31.12.2022 гг) обследовано 1796 больных РС. Пациенты были разделены на две группы сравнения (I группа – мужчины, 616 пациентов; II группа – женщины, 1180 пациентов). В группах сравнения исследовали удельный вес больных по полу, возрасту (на момент постановки диагноза, вероятно началу заболевания и окончанию исследования), клиническому течению РС и смертности. Статистический анализ проводили с помощью χ^2 -критерия Пирсона и t-Студента-Бонферрони, полученные статистические результаты перепроверяли с помощью критерия U-Манна-Уитни. **Результаты и обсуждение.** 65,7% больных составили женщины, 34,3% – мужчины. Соотношение мужчин и женщин составляло 1:1,92. Городских жителей было 66,4%, сельских – 33,6%. Среди городских жителей преобладали женщины ($68,1 \pm 1,4$), мужчин было – $63,0 \pm 1,9\%$, причем эта разница была статистически значимой ($P < 0,05$). Средний возраст на момент постановки диагноза составил $34,9 \pm 0,2$ года ($35,2 \pm 0,4$ года у мужчин; $34,7 \pm 0,3$ года у женщин). На момент предполагаемой первой атаки средний возраст составлял $29,7 \pm 0,2$ года ($29,9 \pm 0,3$ года у мужчин и $29,6 \pm 0,2$ года у женщин). За годы исследования умерло 43 пациента. Средний возраст смерти составил $56,8 \pm 1,2$ года (у мужчин $55,2 \pm 1,6$, у женщин $58,0 \pm 1,6$) ($P > 0,05$). После установления диагноза РС средняя продолжительность жизни составила $15,7 \pm 1,0$ года (минимальная продолжительность жизни — 4 года, максимальная — 40 лет). Период от начала заболевания до установления диагноза РС составил в среднем $5,3 \pm 0,2$ года у мужчин и $5,2 \pm 0,1$ года у женщин. Распределение больных по 5-летним возрастным группам на момент постановки диагноза показало, что высокая заболеваемость среди мужчин наблюдалась в возрастной группе 35-39 лет ($20,1 \pm 1,6\%$ пациентов мужского пола) и среди женщин в возрастной группе 30-34 лет ($0,8 \pm 1,2\%$ пациенток женского пола). Однако статистически эти показатели не различались ($P > 0,05$). Наиболее частым клиническим течением был рецидивирующий ремиттирующий РС у обоих полов – $78,6 \pm 1,7\%$ у мужчин, $77,4 \pm 1,2\%$ у женщин. Хотя CIS чаще встречается у женщин ($4,2 \pm 0,6\%$), разница не была статистически значимой ($P > 0,05$). Остальные типы РС встречались почти в равной степени у представителей обоих полов. **Заключение.** Расширенные исследования половых различий при рассеянном склерозе могут улучшить наше понимание о патофизиологии и лечения заболевания. Полученные результаты закладывают основу для будущих исследований гендерно-зависимого подхода к клиническому течению и лечению рассеянного склероза. **Ключевые слова:** рассеянный склероз, половые различия, клинический случай, возраст.

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