COMPARATIVE CHARACTERISTICS OF EXTRAPYRAMIDAL DISORDERS IN MEN AND WOMEN WITH EPRS ACCORDING TO THE ESRS SCALE

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Background. Extrapyramidal reactions are clinically significant adverse events associated with antipsychotic therapy and may differ in the pattern and severity of motor manifestations. Comparing ESRS scores in men and women allows the characteristics of subjective and objective symptoms, as well as the severity of individual types of movement disorders, to be determined.

Aim of the study. To perform a comparative assessment of all major ESRS indicators in men and women with extrapyramidal reactions, taking age category into account.

Materials and Methods. From the overall database of 170 patients, 94 patients with EPRs were selected for analysis: 45 men and 49 women. Among the men, 20 patients were aged 18–44 years and 25 were aged 45–59 years; the corresponding groups among the women included 27 and 22 patients. The total ESRS score was assessed as the sum of sections I–IV, together with the subjective and objective sections, dystonia and dyskinesia scores, and global ratings of dyskinesia, parkinsonism, dystonia, and akathisia. The results are presented as the mean and standard deviation (M±SD). Between-sex differences were assessed using the Mann–Whitney test. The Holm correction was applied to nine simultaneous comparisons. Differences were considered statistically significant at an adjusted $p<0,05$. The magnitude of between-group differences was additionally assessed using Cohen's d.

Results. The total ESRS score in men with EPRs was 70,8±20,5 points, whereas in women it was 58,3±16,2 points. The difference remained statistically significant after the Holm correction ($p=0,028$) and was characterized by an effect of moderate magnitude approaching a large effect ($d=0,68$).

The mean score for the subjective ESRS section was 11,1±3,1 points in men and 10,2±2,8 points in women. No statistically significant between-sex difference in subjective complaints was found ($p=0,586$). More pronounced differences were identified in the objective assessment of motor disorders: 38,9±11,7 points in men versus 32,1±9,0 points in women ($p=0,028$; $d=0,66$).

The dystonia section score reached 10,4±4,4 points in men and 8,6±4,0 points in women. After correction for multiple comparisons, the difference was not statistically

significant (p=0,256). At the same time, higher scores were recorded in men for the dyskinesia section—10,4±4,3 points versus 7,4±3,6 points in women. This difference remained statistically significant after the Holm correction (p=0,007) and was accompanied by the largest effect size among the indicators studied (d=0,75).

The mean global dyskinesia rating was 2,4±1,7 points in men and 1,9±1,3 points in women (p=0,586). The global parkinsonism rating was also higher in men—4,3±1,9 points versus 3,6±1,6 points in women; however, after correction, the difference did not reach statistical significance (p=0,369). Global dystonia scores were virtually identical and amounted to 1,8±1,4 and 1,8±1,1 points, respectively (p=0,775). The global akathisia rating reached 3,4±1,5 points in men and 3,0±1,4 points in women, with no statistically significant between-sex difference (p=0,586).

In the 18–44-year age group, no statistically significant differences between men and women were identified after the Holm correction. The total ESRS score was 51,9±12,2 points in men and 47,0±8,4 points in women. In the 45–59-year age group, the differences were more pronounced: the total ESRS score reached 85,8±10,9 points in men and 72,1±12,2 points in women (p=0,006). Men in this age group also had higher scores for the objective ESRS section—47,1±7,0 versus 39,4±7,0 points (p=0,006)—and for the dyskinesia section—12,9±3,6 versus 9,7±3,5 points (p=0,044).

Conclusions. Men with EPRs had a higher total ESRS score and higher objective section and dyskinesia scores, whereas subjective complaints, dystonia, and global ratings of individual movement syndromes did not differ statistically significantly. The most pronounced between-sex differences were observed at the age of 45–59 years and were associated mainly with objectively recorded motor disorders and dyskinesia. These findings characterize the examined sample and do not establish a causal effect of sex on the development or severity of extrapyramidal reactions.