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Original article

Effects of Treatment Using the Semantic Feature Analysis Method on the Improvement of Narrative Discourse in Persons with Fluent Aphasias

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SUMMARY

Introduction. Patients with a fluent type of aphasia have semantically poor discourse, which is often uninformative for the interlocutor, having consequences for their daily life. One of the treatment methods used in clinical practice is the semantic feature analysis (SFA). The aim of this study was to determine the impact of this treatment method on the content of discourse in patients with fluent aphasia.
Methods. The sample consisted of 30 subjects with fluent aphasia, namely: Wernicke's aphasia (9 subjects), conductive aphasia (6 subjects), transcortical sensory aphasia (8 subjects), and anomic aphasia (7 subjects). To assess the formation of narrative discourse, the picture subtest "Cake theft" from the Boston diagnostic test for aphasia was used. The content of the discourse was assessed by two experienced speech therapists - aphasiologists.
Results. After the treatment using the semantic feature analysis, an increase in the number of content words was observed in all patients ($H = 22.53$, $df = 3$, $p < .001$; $H = 23.42$, $df = 3$, $p < .001$; $H = 23.10$, $df = 3$, $p < .001$). Patients with Wernicke's and transcortical sensory aphasia had most impairment in the content/informativeness of discourse. Uninformative discourse was observed in 5 (33.33%) patients with Wernicke's and 4 (26.67%) patients with transcortical sensory aphasia. The type and severity of aphasia were shown to affect the informativeness of discourse.
Conclusion. The semantic feature analysis treatment method leads to a significant improvement of narrative discourse in patients with milder forms of aphasia, such as anomic and conductive aphasia.

Keywords: **fluent aphasias, semantic feature analysis method, narrative discourse, stroke**

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INTRODUCTION

According to the comprehensive definition, aphasia is a disorder of language communication caused by brain lesion, which is manifested by impairment of linguistic, paralinguistic and cognitive abilities. It includes several modalities of language functioning: spontaneous speech, understanding, naming, repetition, reading and writing (1).

Given that the clinical picture of aphasic disorders varies significantly, in clinical practice there is a need to categorize patients. In this way, several classifications of aphasia have been distinguished, among which there is a classification based on the characteristics of language production (1, 2). According to this criterion, aphasias are divided into non-fluent and fluent. Non-fluent aphasias are characterized by non-fluent spontaneous speech, with reduced length of phrases and sentences, impaired grammatical and articulatory abilities. This group includes: global, Broca's, transcortical motor aphasia, transcortical mixed aphasia and subcortical motor aphasia (1, 2).

Fluent aphasias are characterized by lexical-semantic deficits in the form of difficulties in finding semantic words, roundabout labeling of terms and the appearance of paraphasias, i.e. replacing one word with another, wrong word. As a result, patients with fluent aphasia have semantically poor discourse. In other words, the discourse of these patients is devoid of content, i.e. uninformative for the interlocutor. Fluent aphasias include: Wernicke's, transcortical sensory aphasia (TSA), conductive and anomic aphasia (1, 3).

Discourse is defined as a whole made up of connected sentences, in which multiple linguistic representations are simultaneously activated (4, 5). Several types of discourse are distinguished: narrative, procedural, expository, and conversational (1, 6, 7). Narrative discourse refers to the ability to provide a structured presentation of events through comprehensive and structured sequences of logically connected ideas, where temporal, spatial, and causal connections between events are established. Narrative discourse involves the reproduction of a story in everyday conversations, and includes the ability to plan and organize thoughts into an adequate structure that the interlocutor understands (8 - 10).

The assessment of narrative discourse in patients with aphasia is generally done by describing a picture that illustrates an event, such as the picture from the Boston Diagnostic Aphasia Examination (BDAE) battery "Cake theft". A suitable picture is placed in front of the patient and the patient is asked to tell everything what is happening on it. This method of assessment allows the clinician to more objectively determine the number of relevant pieces of information (1).

In the obtained samples of narrative discourse, different aspects of the language can be analyzed, such as the length of spoken statements, the number of words produced, the content/meaning of what is expressed (1, 2, 11 - 13).

Semantic feature analysis as a method of treating aphasia

The treatment method based on the analysis of the semantic features of concepts - semantic feature analysis (SFA) is aimed at the rehabilitation of lexical-semantic deficits (14). This method of treatment is very simple to apply. The therapist shows the patient pre-prepared illustrations of some objects and encourages them to produce as many features of the displayed object as possible. For example, if the displayed object is a comb, the clinician asks questions that help elicit semantic features, such as: “What is it for? Which subject group does it belong to? What does it remind you of?” In this way, semantic networks are strengthened, which are often significantly impaired in persons with aphasia. When the patient is not able to give the expected answer to the question posed in relation to the concept from the picture, the clinician provides them with a different kind of assistance. Namely, the patient is shown a list of words and is asked to find the word that refers to the displayed concept (15 - 18).

Previous empirical data indicate the positive effects of SFA on the discourse of individuals with aphasia (19). Given that people with fluent aphasia have a semantically poor discourse, the goal of this paper was to determine the impact of the SFA treatment method on the content of the discourse.

Materials and methods

The study is a prospective monoclinical study. The research was conducted at the Rehabilitation Clinic "Dr Miroslav Zotović" in Belgrade, in the period from January 2022 to January 2023. The permission of the Ethics Committee of the Clinic was filed under the number 03-3476/2 (18.10.2021). The

study included 30 subjects with aphasia. The criteria for inclusion in the study were: that the respondent was an adult, that their native language was Serbian, that they had fluent aphasia caused by a brain lesion, and that at least three months had passed since the onset of aphasia.

Interventions

After the initial testing and taking the first discourse sample, the patients were included in the SFA treatment for six weeks, five times a week, while the duration of one therapy session was 45 minutes. After the end of the treatment, retesting was carried out, i.e. in all patients, a narrative discourse sample was taken again based on the description of the picture "Cake theft". Also, the same procedure was repeated two months after the end of the treatment. Therefore, the analysis of the narrative discourse was performed three times, before the start of treatment, immediately after the end of the six-week therapy, and two months after the end of therapy.

Outcome measures

The Boston diagnostic test for aphasia was used to diagnose aphasia (BDAE) (20). To assess the formation of narrative discourse, the picture subtest "Cake theft" from the BDAE battery was used. The examination was conducted in a noise-insulated room, and during the description of the image, an audio recording was made (with the patient's permission), after which the material was transcribed. In the samples, the total number of content words (nouns, verbs, numbers, adjectives and adverbs) and functional words (pronouns, prepositions, conjunctions, particles, exclamations, auxiliary verbs) was determined. Then the content of the discourse was evaluated as follows: 1. informative; 2. partially informative, and 3. non-informative discourse (6). The content of the discourse was assessed by two experienced speech therapists - aphasiologists independently of each other. Finally, the discourse was evaluated for the presence of the following aphasic symptoms: verbal paraphasias, phonemic paraphasias, neologisms, perseverations, and prolonged response latency.

Statistical data processing

Data processing was performed using the statistical package SPSS (Statistical Package for the Social Sciences – SPSS for Windows, version 23.0, 2015). We used measures of descriptive statistics (arithmetic mean, standard deviation, frequency, percentage) to analyze the demographic data of the respondents. Among the measures of inferential statistics, the Chi-square test was used to test the significance of the difference in categorical variables (gender and type of aphasia), Kruskal Wallis and Mann-Whitney U test, which were selected due to the small number of subjects in individual aphasic syndromes. The Kruskal Wallis test was applied to test the significance of the difference between subjects with different types of aphasia, and for the following variables: presence of content words and functional words, informativeness of discourse, and types of aphasic symptoms. The Mann Whitney U test was used to test the significance of the difference between certain types of aphasia on assessment tasks: types of words, informativeness of discourse and types of aphasic symptoms. Finally, we used a t-test to test the significance of the difference of different types of aphasic syndromes between the initial testing (before the treatment), the second testing (immediately after the six-week treatment), and the third testing (two months after the treatment) for the following variables: presence of content and functional words, informativeness of discourse, and types of aphasic symptoms. $P < .05$ was taken as the level of significance of the difference.

RESULTS

The sample consisted of 30 subjects with fluent aphasia, aged 42 - 79 years. Descriptive data of the sample can be found in Table 1.

The sample included subjects with the following types of aphasia: Wernicke's aphasia (9 subjects), conduction aphasia (6 subjects), TSA (8 subjects), and anomic aphasia (7 subjects). Using the Chi-square test, no statistically significant difference was found in the distribution of certain types of aphasia ($p > .05$). Based on the Aphasia Severity Rating Scale, it was determined that 13 subjects had severe aphasia, 8 subjects had moderate aphasia, and 9 subjects had mild aphasia. Using the Chi-square

Table 1. *Descriptive statistics of the sample of respondents*

Variable	Min	Max	M	SD	Mdn	IQR	*p*
Age	42	79	61	8.98	60.50	12	> .05
Education	8	18	13	2.00	12.00	2	> .05
Time since CVI	4	29	14	6.08	15.00	8	> .05
		N	**%**			**N**	**%**
Period	Acute	3	10	**Gender**	Male	24	80
$p < .001$	Subacute	4	13	$p < .001$	Female	6	20
	Chronic	23	77				

Table 2. *Representation of words in the image description "Cake theft" from the BDAE battery in subjects with different types of aphasia (M, SD)*

Type of aphasia	Types of words	I testing	II testing	III testing	Differences within one group on I, II and III tests
1. Wernicke's	Content	5.67 (2.55)	6.67 (3.24)	7.11 (3.18)	I-II (t = 2.87, df = 8, p < .05); I-III (t = 3.83, df = 8, p < .01); II-III (t = 3.16, df = 8, p < .01)
	Functional	18.11 (2.42)	17.89 (3.18)	17.19 (3.24)	-
2. TSA	Content	6.38 (1.84)	7.10 (2.03)	7.50 (2.69)	I-II (t = 3.41, df = 7, p < .01); I-III (t = 2.43, df = 8, p < .05)
	Functional	16.25 (2.55)	17.14 (1.45)	16.63 (1.76)	-
3. Conduction	Content	11.67 (2.94)	14.50 (3.05)	16.33 (3.72)	I-II (t = 13.00, df = 5, p < .01); I-III (t = 5.00, df = 5, p < .001); II-III (t = 2.73, df = 5, p < .05).
	Functional	17.17 (3.06)	16.80 (3.97)	16.10 (3.20)	-
4. Anomic	Content	20.57 (3.30)	22.43 (4.42)	24.29 (4.15)	I-II (t = 2.73, df = 6, p < .05); I-III (t = 7.75, df = 6, p < .001); II-III (t = 5.30, df = 6, p < .05)
	Functional	18.10 (2.05)	19.29 (2.75)	19.04 (2.11)	-
Differences between different groups concerning content words		1-3 (p < .01); 1-4 (p < .001); 2-3 (p < .01); 2-4 (p < .001); 3-4 (p < .01).	1-3 (p < .001); 1-4 (p < .001); 2-3 (p < .01); 2-4 (p < .001); 3-4 (p < .01).	1-3 (p < .001); 1-4 (p < .001); 2-3 (p < .01); 2-4 (p < .001); 3-4 (p < .01).	
Differences between different groups concerning functional words		-	-	1-4 (p < .05); 2-4 (p < .01); 3-4 (p < .01).	

Table 3. *Evaluation of the content and meaning of the discourse when describing the picture "Cake theft"*

Type of aphasia	Informativeness of discourse	I testing	II testing	III testing
1. Wernicke's	Informative	0	0	0
	Partially informative	4	4	5
	Uninformative	5	5	4
2. TSA	Informative	0	0	0
	Partially informative	4	4	5
	Uninformative	4	4	3
3. Conduction	Informative	2	3	4
	Partially informative	4	3	2
	Uninformative	0	0	0
4. Anomic	Informative	7	7	7
	Partially informative	0	0	0
	Uninformative	0	0	0
Differences between different groups		1-3 ($p < .01$); 1-4 ($p < .001$); 2-3 ($p < .05$); 2-4 ($p < .001$); 3-4 ($p < .01$).	1-3 ($p < .01$); 1-4 ($p < .001$); 2-3 ($p < .01$); 2-4 ($p < .001$); 3-4 ($p < .05$).	1-3 ($p < .01$); 1-4 ($p < .001$); 2-3 ($p < .01$); 2-4 ($p < .01$); 3-4 ($p < .05$).

test, no statistically significant difference was found in relation to the severity of aphasia in the sample ($p > .05$).

The results of the Kruskal Wallis test show that subjects with different forms of aphasia differ in all three tests according to the representation of content words ($H = 22.53$, $df = 3$, $p < .001$; $H = 23.42$, $df = 3$, $p < .001$; $H = 23.10$, $df = 3$, $p < .001$). On the other hand, in the case of functional words, differences were found only in the third test ($H = 9.83$, $df = 3$, $p > .05$). Table 2 shows the differences between various aphasic syndromes.

Table 3 shows the results of the content assessment and there were significant differences between the subjects with different forms of aphasia, as determined by the Kruskal Wallis test for all three tests ($H = 20.04$, $df = 3$, $p < .001$; $H = 21.39$, $df = 3$, $p < .001$; $H = 18.62$, $df = 3$, $p < .001$). On the other hand, in the individual groups of subjects, no significant differences in the discourse content were found between all three tests.

Table 4 shows the results of the Kruskal Wallis test; the subjects with different types of aphasia during the picture description from the BDAE battery of "Cake theft" tests differed significantly in respect to the prevalence of aphasic symptoms. For the symptom of verbal paraphasia the following values were obtained ($H = 15.57$, $df = 3$, $p < .001$; $H = 17.69$, $df = 3$, $p < .001$; $H = 19.40$, $df = 3$, $p < .001$).

The following results were obtained for the symptom of phonemic paraphasia on tests ($H = 22.78$, $df = 3$, $p < .001$; $H = 23.88$, $df = 3$, $p < .001$; $H = 21.10$, $df = 3$, $p < .001$).

The symptom of neologisms yielded the following values ($H = 21.00$, $df = 3$, $p < .001$; $H = 21.64$, $df = 3$, $p < .001$; $H = 15.36$, $df = 3$, $p < .01$). In the tests, the following values were found for perseverations symptoms ($H = 9.80$, $df = 3$, $p < .05$; $H = 9.80$, $df = 3$, $p < .01$; $H = 11.67$, $df = 3$, $p < .01$).

Table 4. *Representation of symptoms (M, SD) in the discourse of subjects with different types of aphasia when describing the picture "Cake theft"*

Type of aphasia	Symptoms	I testing	II testing	III testing	Differences within one group on I, II and III tests
1. Wernicke's	Verbal paraphasias	3.89 (1.90)	3.22 (1.70)	3.10 (1.45)	I-III (t = 4.00, df = 8, p < .01)
	Phonemic paraphasias	0.78 (0.69)	0.40 (0.30)	0.44 (0.32)	-
	Neologisms	3.78 (1.71)	2.60 (1.50)	2.10 (1.70)	I-II (t = 5.00, df = 8, p < .001); I-III (t = 5.50, df = 8, p < .001).
	Perseverations	3.40 (1.09)	3.90 (1.30)	3.80 (1.40)	-
2. TSA	Verbal paraphasias	5.13 (1.64)	3.50 (1.92)	2.88 (1.35)	I-II (t = 8.82, df = 7, p < .001); I-III (t = 7.18, df = 7, p < .001).
	Phonemic paraphasias	-	-	-	-
	Neologisms	5.70 (3.50)	4.13 (2.90)	3.40 (2.30)	I-II (t = 8.88, df = 7, p < .01); I-III (t = 7.00, df = 7, p < .001); II-III (t = 2.39, df = 7, p < .05).
	Perseverations	6.25 (2.10)	5.40 (2.30)	5.13 (2.16)	I-III (t = 2.47, df = 7, p < .05).
3. Conduction	Verbal paraphasias	2.33 (0.81)	1.33 (0.81)	1.00 (0.80)	I-III (t = 7.00, df = 5, p < .01).
	Phonemic paraphasias	7.33 (1.50)	5.10 (1.10)	4.00 (1.00)	I-II (t = 3.87, df = 5, p < .001); I-III (t = 6.74, df = 5, p < .001); II-III (t = 6.32, df = 5, p < .01).
	Neologisms	0.90 (0.70)	0.30 (0.20)	0.45 (0.30)	
	Perseverations	4.33 (2.70)	3.17 (2.10)	3.20 (2.20)	I-II (t = 3.79, df = 5, p < .01).
4. Anomic	Verbal paraphasias	1.29 (1.38)	0.14 (0.37)	-	I-II (t = 2.48, df = 6, p < .05); I-III (t = 2.45, df = 6, p < .05).
	Phonemic paraphasias	-	-	-	
	Neologisms	-	-	-	
	Perseverations	2.43 (1.10)	1.80 (1.20)	1.20 (1.00)	I- III (t = 3.36, df = 6, p < .01).
Differences between different groups	Verbal paraphasias	1-4 (p< .01); 2-3 (p< .01); 2-4 (p< .001).	1-3 (p< .05); 1-4 (p< .001); 2-3 (p< .01); 2-4 (p< .001); 3-4 (p< .01).	1-3 (p< .05); 1-4 (p< .01); 2-3 (p< .01); 2-4 (p< .001); 3-4 (p< .01).	
	Phonemic paraphasias	1-2 (p< .05); 1-3 (p< .001); 2-3 (p< .001); 3-4 (p< .001).	1-2 (p< .05); 1-3 (p< .001); 2-3 (p< .001); 3-4 (p< .001).	1-2 (p< .05); 1-3 (p< .001); 2-3 (p< .001); 3-4 (p< .001).	
	Neologisms	1-3 (p< .01); 1-4 (p< .001); 2-3 (p< .01); 2-4 (p< .001); 3-4 (p< .05).	1-3 (p< .05); 1-4 (p< .01); 2-3 (p< .01); 2-4 (p< .01).	1-3 (p< .05); 1-4 (p< .01); 2-3 (p< .01); 2-4 (p< .001).	
	Perseverations	1-2 (p< .05); 2-4 (p< .001); 3-4 (p< .01).	1-4 (p< .05); 2-4 (p< .001).	1-4 (p< .01); 2-4 (p< .001); 3-4 (p< .01).	

DISCUSSION

Given that fluent aphasias are characterized by lexical-semantic deficits, many patients with these aphasias have a significantly reduced discourse. Therefore, great attention is paid to the treatment of lexical-semantic deficits in people with these aphasias. Based on that, in this paper, we investigated the impact of treatment using the semantic feature analysis treatment method on the improvement of the narrative discourse in patients with different types of fluent aphasia.

The results of our study showed that patients with Wernicke's, TSA, conduction and anomic aphasia produced more content words after the treatment. This finding was also obtained two months

after the end of the treatment. By comparing patients with different types of aphasia according to the increase in the number of content words, it was found that patients with anomic aphasia had significantly more content words after treatment compared to patients with other types of aphasia. Furthermore, patients with conduction aphasia had more content words compared to the groups with Wernicke's aphasia and TSA, while patients with TSA and patients with Wernicke's aphasia did not differ. These findings show that the assessment of content words can represent a significant marker in differentiating certain types of fluent aphasia. Further analysis of the obtained data showed that functional words are significantly represented in the discourse of patients with fluent aphasia, which is in agreement with the data of earlier research (21, 22).

Regarding the evaluation of the content of the discourse, our results showed that discourse meaning is most impaired in subjects with TSA and Wernicke's aphasia. Also, the results of our research showed that the treatment led to a significant improvement in the discourse content only in one subject with TSA and one with Wernicke's aphasia. Both respondents progressed from non-informative discourse after treatment to the level of partially informative discourse. In conduction aphasia, significant improvement was found in two patients, and in both cases the patients progressed from a partially informative discourse to a fully adequate content discourse. In all patients with anomic aphasia, the discourse was rated the highest, i.e. as informative, however, their discourse consisted of a large number of pauses and latency in searching for an adequate word.

Additional analysis of the obtained data showed that the respondents with TSA and Wernicke's aphasia had the lowest number of content words, in which uninformative discourse was identified in the largest number of cases, i.e. discourse without meaning. These findings showed a clear connection between the prevalence of content words and the level of informativeness of the discourse, which is also discussed by other authors (23, 24). Also, the data from the literature showed that patients with TSA and Wernicke's aphasia produce many semantically blank words such as "this, something, thing", which significantly impairs the level of informativeness of the discourse (1, 25). On the other hand, subjects with conduction and anomic aphasia showed minor impairments at the level of discourse content and informativeness, which is in accordance with earlier studies that showed that subjects with anomic aphasia were successful in forming narrative discourse after treatment with the semantic feature analysis (SFA) method (8). It should also be noted that some studies on anomic aphasia have not shown a significant improvement of discourse after treatment with the SFA method (26). Therefore, the question of the effects of the SFA method on improving discourse in people with anomic aphasia is still open for research.

The literature highlights the importance of analyzing the presence of aphasic symptoms in the discourse of persons with aphasia (27), because it is considered that important language deficits can be identified precisely in narrative discourse (28, 29). The results of our research showed that verbal paraphasias are identified in all types of aphasic syndromes, with the fact that they are the most common in Wernicke's aphasia, and the least common in anomic aphasia. These findings support the data of other authors who point out that the speech of patients with fluent aphasia is characterized by verbal paraphasias (1, 25).

According to our findings, the treatment led to a significant reduction of paraphasias and neologisms in subjects with TSA and Wernicke's aphasia. In conduction aphasia, the treatment also led to a reduction in paraphasias, both verbal and phonemic. As for anomic aphasia, a significant reduction in the number of verbal paraphasias and perseverations was found in all patients after treatment. Patients with TSA, in addition to the above symptoms, also had a significant reduction in the number of perseverations after treatment, as well as during the control retest. Patients with conduction aphasia had a lower number of both verbal and phonemic paraphasias after treatment, as well as on control retesting. Patients with anomic aphasia had a significant reduction in the number of verbal paraphasias and in the number of perseverative errors after treatment. In addition, all subjects included in this study exhibited a certain degree of latency that manifested itself when searching for the appropriate word during the discourse. Our findings showed that there was no reduction in word retrieval latency after the treatment was completed.

In a study by Christiansen et al., the presence of aphasic symptoms in narrative discourse was compared in patients with anomic, conduction, and Wernicke's aphasia (30). The authors determined

that patients with conduction aphasia exhibited a higher number of perseverations, while patients with Wernicke's aphasia had an uninformative discourse. These findings are in agreement with the results of our research, noting that in subjects with Wernicke's aphasia, perseverations were also recorded. As for anomic aphasia, according to our findings, these patients generally exhibited prolonged word retrieval latency during the picture description. Similar data are reported by the results of recent research (31).

Since the quality of narrative discourse is a parameter for determining the quality of daily functioning of patients, it is considered that the treatment of discourse in patients with fluent aphasia should be given special attention (4, 21, 23, 32). The results of our research showed that the treatment method based on semantic feature analysis leads to an improvement of discourse in the majority of treated patients. However, it has been shown that the effect of this method depends on the nature of the aphasic disorder. For example, the worst results were achieved in subjects with Wernicke's, and the best in subjects with anomic aphasia. The positive effects of treatment using the SFA method are also confirmed by the data of other studies (8, 15). Other authors state that discourse improvement is mainly observed in milder forms of fluent aphasia (17). Somewhat more detailed information about the effects of the SFA method on improving discourse is provided by Boyle (33). Namely, Boyle states that the improvement is reflected in better naming of notion shown in the picture, but not in connecting them into a meaningful whole. Also, analyzing the papers on the effects of the SFA method on naming ability, Boyle determined that all patients showed better performance after the treatment (16).

LIMITATIONS

One of the limitations of this study is the heterogeneity of the subjects included in the sample. Therefore, in future research, the respondents should be equalized according to the symptoms and severity of the aphasic disorder. Other limitations relate to the relatively small number of respondents, 15 in each group, which is not enough to make large predictions. Finally, future studies should include the examination of other forms of discourse.

CONCLUSION

Deficits in content/informativeness of discourse were noticed in all types of fluent aphasia, but patients with transcortical sensory aphasia and Wernicke's aphasia had more difficulties than those with conduction and anomic aphasia. After the treatment using the semantic feature analysis method, most patients with aphasia produced a larger number of content words. This finding was also recorded two months after the end of the therapy. The degree of improvement of discourse content, i.e. its informativeness depended on the type of aphasia and severity of the lexical-semantic deficit. Namely, in patients with severe lexical-semantic deficits (Wernicke's and transcortical sensory aphasia), there was a minor improvement in the informativeness of discourse. However, the treatment method based on the semantic feature analysis led to a greater improvement of discourse in patients with milder lexical-semantic deficits (conduction and anomic aphasia). Also, the treatment using the semantic feature analysis method led to a reduction of paraphasias and neologisms in the narrative discourse of patients with fluent aphasia.

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Efekat tretmana korišćenjem analize semantičkih karakteristika na poboljšanje narativnog diskursa kod osoba sa fluentnom afazijom

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SAŽETAK

Uvod. Bolesnici sa fluentnim tipom afazije imaju semantički narušen diskurs, koji je često neinformativan za sagovornika, što ima posledice na njihov svakodnevni život. Jedna od metoda lečenja koja se koristi u kliničkoj praksi jeste analiza semantičkih karakteristika (ASK). Cilj ovog istraživanja bio je da se utvrdi uticaj ove metode lečenja na sadržaj diskursa kod bolesnika sa fluentnom afazijom.
Metode. Uzorak je činilo 30 ispitanika sa fluentnim afazijama: Vernikeova afazija (9 ispitanika), konduktivna afazija (6 ispitanika), transkortikalna senzorna afazija (8 ispitanika) i anomična afazija (7 ispitanika). Za procenu formiranja narativnog diskursa korišćen je suptest slika „Krađa kolača" iz Bostonskog dijagnostičkog testa za afaziju. Sadržaj diskursa procenjivala su dva iskusna logopeda – afaziologa.
Rezultati. Nakon tretmana analizom semantičkih karakteristika uočen je porast broja sadržajnih reči kod svih bolesnika ($H = 22,53$, $df = 3$, $p < 0,001$; $H = 23,42$, $df = 3$, $p < 0,001$; $H = 23,10$, $df = 3$, $p < 0,001$). Bolesnici sa Vernikeovom i transkortikalnom senzornom afazijom imali su najviše oštećenja u sadržaju/informativnosti diskursa. Neinformativan diskurs primećen je kod pet (33,33%) bolesnika sa Vernikeovom i četiri (26,67%) ispitanika sa transkortikalnom senzornom afazijom. Pokazalo se da vrsta i težina afazije utiču na informativnost diskursa.
Zaključak. Metoda tretmana analize semantičkih karakteristika dovodi do značajnog poboljšanja narativnog diskursa kod bolesnika sa blažim oblicima afazije, kao što su anomična i konduktivna afazija.

Ključne reči: **fluentne afazije, metoda analize semantičkih karakteristika, narativni diskurs, moždani udar**