## Defense Mechanisms in Alcohol Dependent Patients with Oral and Oropharinegal Cancer

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## ABSTRACT

The effects of psychological factors in alcoholics with malignant tumor of the oral cavity and oropharynx are scarcely explored. The aim of the research was to examine early family relations and investigate differences in the use of defense mechanisms in alcohol dependent patients suffering from malignant tumor of the oral cavity and oropharynx compared to alcohol dependent persons without malignant tumors and healthy controls. The research included 51 alcohol dependent patients treated for malignant tumor of the oral cavity and oropharynx at the University Hospital Center Rijeka from 2005 to 2009. The control groups corresponded to the experimental group in age, sex and education level. The research used a general demographic questionnaire, the Mini International Neuropsychiatric Interview and the Revised Questionnaire of Life Style and Defense Mechanisms. The research groups showed significant differences in difficult childhood (p < 0.001) including abuse (p = 0.004). The alcohol dependent persons suffering from malignant tumors of the oral cavity and oropharynx significantly less frequently used primitive defense mechanisms of regression (p = 0.004) and displacement (p = 0.013) compared to alcoholics without malignant tumors who significantly more often used neurotic defense mechanisms – compensation (p = 0.005) and intellectualization (p < 0.001). The earliest emotional experiences and quality of family relations affect the development of defense mechanisms. These are the psychological factors in the development of oropharyngeal cancer in alcohol addicts.

Key words: defense mechanisms, oral and oropharyngeal cancer, alcohol dependent patients

## Introduction

Alcohol dependence in today's medical practice is clearly associated with a range of disorders and diseases among which malignant tumors of the oral cavity and oropharynx are quite significant<sup>1–5</sup>. Since alcohol has the form of small molecules, it easily passes through the mucous membrane lining the gastrointestinal tract and penetrates various cells, especially nervous tissue cells. It changes the structure of lipid cell membranes and partly melts them, alters the protein structure of cells and causes disruption of their functions<sup>6</sup>. Consummation of alcohol is also associated with differences in liver metabolic capacity which is determined by genetic differences<sup>7,8</sup>. Alcohol intake can induce the methylation of the p15 gene and start the process directly linked with cancerogenesis<sup>9</sup>.

While biological mechanisms of alcohol-induced malignant disease development are largely known, effects of psychological factors in alcohol dependence and development of malignant tumor of the oral cavity and oropharynx, as well as development of malignant diseases in general are almost unexplored. Causal relations between conscious and unconscious emotional conflicts and the dysfunction of organ systems has already been described<sup>10–12</sup>. Even though modern science confirmed and gave significant contribution to theories formulated at the beginning of the century that cancer is largely a psychosomatic disease, many questions remained unanswered<sup>13–15</sup>.

One of the most important questions is why in certain mental disorders a disease affects particular organs or organ systems<sup>16</sup>. Malignant tumors of the oral cavity and oropharynx affect areas which represent vital life functions - breathing, swallowing and speech. Furthermore, they significantly damage patients' physical appearance<sup>17-19</sup>. Considering the localization of the oral cavity and oropharynx, a question emerged as to the correlation between patients' psychosomatic response and the oral stage of development. The oral stage lasts approximately from birth to one year. The mouth, i.e., oral cavity mucosa and mucosa-skin junction of the perioral zone act as the perception and gratification zone in this stage of development, which might indicate a significant psychological correlation between alcohol dependence and malignant tumor of oral cavity and oropharynx<sup>20</sup>. The oral stage affects the formation of a person's character, or least produces effect on the development of emphasized oral traits of personality. Major issue of persons with emphasized oral traits of personality is oral addiction as an expression of fixation (in symbolic terms: hunger for love). Due to inadequate relationship with parents in the earliest stage, but also in subsequent stages of psychological development, such persons can develop the punishing superego, which at certain moments responds to external frustrating factors by autoaggression. Autoaggression signifies a symbolic »punishment«, which can manifest itself in the form of cancer<sup>21-24</sup>. In these circumstances, the disease can symbolize search for warmth, care and love. This way a person unconsciously expresses his/her constant need for parent figures who failed to provide adequate care and love. Defense mechanisms play an important role in regulation of fear and anxiety level in such complicated mental processes<sup>21,22,25</sup>. Defense mechanisms are mental mechanisms used by a person in order to suppress or cope with anxiety and unpleasant traumatic experiences. Defense mechanisms have been a long standing concept in the field of psychology, dating back to Freud's introduction of them as unconscious processes which modified or distorted reality to protect individuals from awareness of their own unacceptable thoughts, impulses or wishes<sup>26</sup>. The definition of defense mechanism in the DSM-IV (Diagnostic and Statistical Manual of Mental Disorders) is as follows: »Defense mechanisms are automatic psychological processes that protect the individual against anxiety and from the awareness of internal or external dangers or stressors. Individuals are often unaware of these processes as they operate. Defense mechanisms mediate the individual's reaction to emotional conflicts and to internal and external stressors «27.

There are several classifications and definitions of defense mechanisms, but most authors categorize them according to developmental stage in which they occur. Kellerman et al. researched the roles of defense mechanisms in regulation of emotions and found correlations between eight basic defense mechanisms and primary emotions<sup>28</sup>. An individual can use combinations of defense mechanisms; nevertheless, some defense mechanisms

nisms usually dominate. Defense mechanisms differ in structure; ones are primitive, immature and they are formed during the oral stage of development (e.g. regression, displacement, projection) and others are formed in later stages of development. These are called neurotic defense mechanisms and they are more differentiated. Mature defense mechanisms develop last. Some authors classify defense mechanisms according to whether they block impulses (reaction formation, repression, negation and intellectualization) or they liberate impulses (projection, compensation, displacement and regression). A series of researches demonstrated that persons without a clinically significant psychopathology have larger number of blocking defense mechanisms (reaction formation, repression, negation, intellectualization)  $^{28,29}$ . Valliant et al. say that the importance of immature mechanisms is in their use as tools for adaptation to stressful situations occurring in early interpersonal relations<sup>30</sup>.

It could be assumed that alcohol-dependent patients suffering from malignant tumors of the oral cavity and oropharynx and patients who suffer only from alcohol dependence had equally inadequate and unsatisfactory family relations from the earliest period in their lives, but that the alcohol dependent persons managed to reduce the level of auto-destruction by selecting more mature defense mechanisms.

The aim of the study was to determine whether and how alcohol-dependent patients with malignant tumor of the oral cavity and oropharynx differ from alcohol dependent participants in their use of defense mechanisms and the assessment of quality of early family relations and to determine whether these two groups differ from healthy population in the same parameters.

## **Participants and Methods**

## **Participants**

Alcohol dependent patients diagnosed with malignant tumor of the oral cavity and oropharynx were the first group of participants. They had previously been hospitalized and undergone operation at the Clinic for Maxillofacial Surgery at the University Hospital Center in Rijeka, Croatia. The inclusion criteria were the following:

- a) The diagnosis of malignant tumor of the oral cavity and oropharynx based on clinical examination according to the TNM classification, a generally accepted method of describing the extent of tumor in a patient's body (T describes the size of the tumor, N describes metastases in regional lymph nodes and M describes distant metastases) $^{31}$ , radiological (computed tomography CT, head and neck ultrasound) and pathohystological biopsy verification of malignant disease,
- b) The diagnosis of alcohol dependence according to the DSM IV (Diagnostic and Statistical Manual of Mental Disorders) by using the MINI (Mini International Neuropsychiatric Interview),

- Absence of comorbid mental diseases (organic psychosyndrome and psychotic disorder),
- d) Written informed consent for participation in the research.

The diagnosis of malignant tumor of the oral cavity and oropharynx was given by a maxillofacial surgeon according to the set criteria. The patients were examined by psychiatrists at the Clinic for Oral and Maxillofacial Surgery, University Hospital Center in Rijeka where psychiatric anamnesis was established for each patient and where each patient responded to the MINI questionnaire. Seventy-nine patients were diagnosed with malignant tumor of the oral cavity and oropharynx at the clinic in the observed period. Nine patients (11%) did not meet the criteria for the diagnosis, nine (11%) had an associated psychoorganic syndrome, while ten (13%) refused to give their written informed consent and were therefore excluded from the research.

The final sample included fifty-one patients who satisfied all the inclusion criteria. Participants had the mean age of 57.02±8.87. Eleven (21.6%) were women and forty (78.4%) were men. Education level of the majority of the participants was secondary (36 (70.6%)) or elementary (13 (25.5%)). Eighteen patients (33.3%) were employed, ten (19.6%) were unemployed and twenty-three (45.1%) were retired. Thirty-four (66.7%) were married. The participants completed a structured interview and a self-report questionnaire (Revised Questionnaire of Life Style and Defense Mechanisms).

The first group of participants was compared with two control groups corresponding in sex, age and education level. The first control group (the second group of participants) was formed of patients treated at the Psychiatric Clinic of the Rijeka University Hospital Center, Department for Alcohol Addiction. The inclusion criteria for the second group of participants were as follows: a) the diagnosis of alcohol dependence according to the DSM-IV criteria by using the MINI, b) absence of organic psychosyndrome or a psychotic disorder. Sixty-seven participants were included in the screening, of which nine (13%) met the criteria for organic psychosyndrome, 4 (6%) had a psychotic disorder and 3 (4%) did not give a written informed consent and were not included in the

research. Fifty-one patients in the second group of participants met the inclusion criteria, of which eleven (22%) were women and forty (78%) were men.

The second control group (the third group of participants) consisted of fifty-one participants, of which eleven (22%) were women and forty (78%) were men, who had previously had no health problems and who were selected by using random sampling method at a family practice outpatient clinic in Rijeka. The absence of alcohol addiction, organic psychosyndrome and psychotic disorder was set as the inclusion criterion for the formation of the third group of participants. Of sixty-four contacted participants, thirteen (20%) refused to give a written informed consent. The flow of participants is shown in Figure 1.

## Methods

General demographic data were gathered by using a written structured interview. The participants completed the interview themselves. The interview consisted of thirty questions, of which nine were multiple-choice questions, eleven were yes/no questions and ten were questions with answers in the form of numbers. Twenty-three questions referred to demographic data (sex, age, marital status, number of children, education, employment status, economic status etc.) and eight questions related to family relations, brothers and sisters, family anamnesis, statements of a difficult and bad childhood, childhood abuse, parents' divorce, loss of a parent, a parent's remarriage and subjective economic status.

Psychiatric anamnesis was established for each patient and each patient responded to the MINI questionnaire. The MINI is a short structured interview used for diagnosing alcohol dependence and/or psychotic disorder. The MINI was developed by clinicians and psychiatrics in the USA in the 1990ies according to the DSM-IV and the ICD-10 (International Classification of Diseases 10th Revision) classifications of psychiatric disorders. It was designed to meet the needs for a short, but precisely structured psychiatric interview for multicenter clinical assessments and epidemiology studies. It takes 15 minutes to administer the questionnaire<sup>27,32–34</sup>.

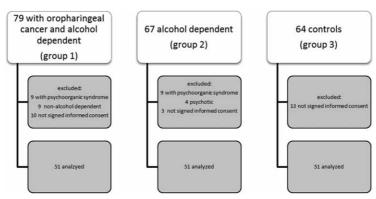


Fig. 1. Participants »flow-chart« in the study.

Defense mechanisms were assessed by using a psychological measuring instrument called the Revised Questionnaire of Life Style and Defense Mechanisms, which had been described by H. Kellerman<sup>29</sup>. The questionnaire examines forms of behavior significant for defining defense mechanisms. These forms of behavior are expressed in the lifestyle of individuals. The questionnaire statements are divided into eight dimensions of defense mechanisms (negation, regression, compensation, intellectualization, repression, displacement, projection and reaction formation). The questionnaire consists of 92 statements presented in the form of yes and no answers. It took approximately 15 minutes to administer the questionnaire and each patient was examined individually. The study was approved by the local ethical committee.

## Statistical analysis

Statistical analyses were performed using the statistical package SPSS 11 for Windows operating system. Differences in the questionnaire results among the groups were tested by the one-way analysis of variance. The significance of differences among the groups was tested by using the LSD test. The  $\chi^2$ -test was used for the assessment of differences in demographic characteristics. The significance level was set at 0.05.

#### Results

## Demographic data and family relations

Statistical analysis showed that the three groups significantly differed in family anamnesis ( $\chi^2$ =58.852; ss=4; p<0.001), in whether they had a difficult and bad childhood ( $\chi^2$ =16.541; ss=2; p<0.001) and in whether they were abused during childhood ( $\chi^2$ =11.035; ss=2;

p=0.004). They also differed in whether they lost a parent ( $\chi^2$ =6.491; ss=2; p=0.039), in whether their parents remarried ( $\chi^2$ =7.778; ss=2; p=0.020) and in subjective economic status ( $\chi^2$ =20.298; ss=6; p=0.002) (Table 1).

#### Defense mechanisms

We obtained statistically significant difference among the three groups concerning their use of the mechanisms of regression (F=5.785; p=0.004), compensation (F=5.526; p=0.005), intellectualization (F=8.605; p<0.001) and displacement (F=4.473; p=0.013). The LSD test was used as a post-hoc test in order to verify which groups showed statistically significant differences.

The LSD test demonstrated that the second group of participants used regression statistically more frequently (M=32.88±13.16) than the first group (M=23.00±16.12; p=0.001). There was not any statistically significant difference between the second and the third group in the use of regression.

We found a statistically significant difference between the first group of participants (M=29.61±17.43) and the second group of participants (M=40.78±17.65; p=0.001) in mechanisms of compensation. We have also obtained a statistically significant difference between the first (M=67.78±18.06) and the second group of participants (M=77.06±15.00; p=0.009) and between the second (M=77.06±15.00) and the third group (M=62.71±19.77; p<0.001) in the use of intellectualization.

As for the mechanism of displacement, we found a statistically significant difference between the first (M=  $16.47\pm17.30$ ) and the second group (M= $24.31\pm18.79$ ; p= 0.030) and between the first (M= $16.47\pm17.30$ ) and the third group of participants (M= $26.67\pm17.96$ ; p=0.005). All results are shown in Table 2.

Groups  Demographic questionnaire and family relations		Group 1 (N=51)	Group 2	Group 3	$\chi^2$	р
			(N=51)	(N=51)		
Brothers or sisters	Yes	48	48	44	2.690	0.261
Family anamnesis	Cancer	22	3	3		<0.001
	Alcoholism	14	33	13	58.852	
	Other	14	12	20	58.852	
	Nothing particular	1	3	15		
Difficult and bad childhood	Yes	35	29	15	16.541	< 0.001
Childhood abuse	Yes	19	16	5	11.035	0.004
Divorced parents	Yes	7	5	1	4.708	0.095
Widowed parents	Yes	20	22	32	6.491	0.039
Parent's remarriage	Yes	13	7	3	7.778	0.020
Subjective economic status	Lower	22	30	10		
	Average	26	19	35	20.298	0.002
	Good	3	2	6		

TABLE 2
DIFFERENCES IN RESULTS OF THE REVISED QUESTIONNAIRE OF LIFE STYLE AND DEFENSE MECHANISMS AMONG THE THREE GROUPS OF PARTICIPANTS

Defense Mechanisms*	Groups	N	$\overline{X}$	SD	$\mathbf{F}$	p	LSD test	p
Reaction formation – neurotic defense mecha- nism	Group 1	51	41.37	19.90			Group 1 and 2	0.551
	Group 2	51	43.73	16.37	1.982	0.141	Group 1 and 3	0.180
	Group 3	51	36.08	22.81			Group 2 and 3	0.054
Negation – neurotic defense mechanism	Group 1	51	53.75	12.94			Group 1 and 2	0.133
	Group 2	51	48.94	17.46	2.276	0.106	Group 1 and 3	0.041
	Group 3	51	47.20	17.35			Group 2 and 3	0.584
Regression – primitive defense mechanism	Group 1	51	23.00	16.12			Group 1 and 2	0.001
	Group 2	51	32.88	13.16	5.785	0.004	Group 1 and 3	0.076
	Group 3	51	28.20	14.59			Group 2 and 3	0.109
Repression – neurotic defense mechanism	Group 1	51	28.24	13.37			Group 1 and 2	0.153
	Group 2	51	33.73	24.00	1.145	0.321	Group 1 and 3	0.759
	Group 3	51	29.41	19.01			Group 2 and 3	0.261
Compensation – neurotic defense mechanism	Group 1	51	29.61	17.43			Group 1 and 2	0.001
	Group 2	51	40.78	17.65	5.526	0.005	Group 1 and 3	0.105
	Group 3	51	35.10	15.79			Group 2 and 3	0.093
Projection – primitive defense mechanism	Group 1	51	60.75	21.65			Group 1 and 2	0.102
	Group 2	51	68.43	18.88	1.537	0.218	Group 1 and 3	0.766
	Group 3	51	62.14	29.06			Group 2 and 3	0.180
Intellectualization – neurotic defense mechanism	Group 1	51	67.78	18.06			Group 1 and 2	0.009
	Group 2	51	77.06	15.00	8.605	< 0.001	Group 1 and 3	0.150
	Group 3	51	62.71	19.77			Group 2 and 3	< 0.001
Displacement – primitive defense mechanism	Group 1	51	16.47	17.30			Group 1 and 2	0.030
	Group 2	51	24.31	18.79	4.473	0.013	Group 1 and 3	0.005
	Group 3	51	26.67	17.96			Group 2 and 3	0.511

<sup>\*</sup> The results were tested by one-way analysis of variance and LSD test

## Discussion

The result of our research showed that the group of alcohol dependent participants with malignant disease of the oral cavity and oropharynx (the first group) had significantly damaged family relations, significantly more frequently reported difficult childhood and they had significantly more often been abused and traumatized, compared to the alcohol dependent participants without malignant diseases (the second group) and the participants without health problems (the third group). These results are in accordance with the proposed hypothesis. The results of our research are similar to results of researches exploring early family relations of alcohol dependent persons, frequent abuse in the early childhood and the psychological effects in adult age<sup>35-42</sup>. The results shown in the first group of participants are in line with researches done by Arnold, Rogers and Cook who say that the experience of sexual or other forms of abuse in childhood is often recognized in adult age through many somatic symptoms and physical diseases 40,43-46.

According to our results, participants in the first group mostly had dysfunctional families, often without one parent, and often with poor economic status. More frequent childhood traumas might indicate inadequate care in the earliest developmental period, i.e., the gratification of the needs of a small child was insufficient and non-stimulating for psychological development during the oral stage. According to psychodynamic concepts, this leads to fixations in developmental stages, the oral stage in this case.

All groups of participants used both primitive and neurotic defense mechanisms. However, the groups differed in the profile of defense mechanisms. The first group significantly less frequently used primitive defense mechanisms of regression and displacement compared to other two groups. On the other hand, the group of alcohol dependent participants without malignant disease significantly more frequently used neurotic defense mechanisms of compensation (compared to the first group) and intellectualization (compared to other two groups). Other defense mechanisms (negation, repression, reaction formation, projection) were equally used by all groups.

These results considerably differed from our expectations that the group with malignant tumor would more frequently use primitive defense mechanisms, especially compared to the healthy control group<sup>47</sup>. Comparison with the literature data is hindered by the fact that most of the researches investigating defense mechanisms used different theories and instruments. According to our findings, this research is the first of its kind to work with the population of patients suffering both from malignant tumor of the oral cavity and oropharynx and alcohol dependence.

Intellectualization, as a defense mechanism typical for alcohol dependent persons, has already been described in literature. Rohsenow et al. demonstrate how alcohol dependent persons try to bring down the level of psychopathology by using intellectualization<sup>48</sup>. Furthermore, in another study, these authors show that alcohol addicts use intellectualization as means towards a better social functioning<sup>49</sup>. In psychopathological sense, alcohol addicts use intellectualization in order to find reasons to continue using alcohol as a model of reducing anxiety, even in cases when the first »defense line« of negation and projection becomes dysfunctional<sup>48</sup>. The use of compensation would allow the first group to compensate symbolically or literally for the perceived emotional deprivation (by taking alcohol) to the extent that brings satisfaction. However, the first group failed to develop compensation mechanisms, probably as a result of a stronger traumatization in early developmental period and a poor quality of early emotional relations to primary objects<sup>50</sup>. The use of alcohol could not compensate for oral needs (for love) of these participants, nor was this form of auto-destruction sufficient.

The group of participants with malignant tumor less frequently used defense mechanisms of regression and displacement. It is possible that this group did not manage to activate strong primitive defense mechanisms during psychological development. This finding is interesting considering the fact that literature describes regression as significantly present defense mechanism in patients with malignant tumors<sup>51–53</sup>. These patients possibly failed to surpass the way of finding anxiety relief by means of the body in early stages of development. For example, at the earliest stage of development, a child can recognize and reduce anxiety only through the body since other mental mechanisms such as defense mechanisms are still not developed. Moreover, in such cases, fixation on this way of reducing anxiety remains the model of dealing with anxiety in a dult age as well  $^{20,54-56}$ . Proper emotional stimulation provided by primary objects, the first caretakers, most often mothers, is necessary in order for a person to overcome this way of resolving anxiety. It is quite possible that a negative and unsupportive environment did not prefer the displacement of negative emotions on less dangerous, but secure objects. Dysfunctional families in which these participants grew up did not even have such objects. Regression also could not bring any relief, since it meant going back to periods of greater mental energy and security. If a person does not have such periods in life, regression loses its function as a defense mechanism.

Body language is the first »language« and emotional experience that a child can use and with which it is born. All mental mechanisms develop through the stimulation in the mother-child relationship. If the mother-child relationship is unsatisfactory and non-stimulating, development of defense mechanisms for reducing anxiety can be compromised. Furthermore, such emotional environment prefers emotional numbness and dissociation. Emotional numbness and dissociation are the mechanisms of »somatizing« of emotional conflicts, which are the key features of alexithymia<sup>37,57,58</sup>.

It appears that inadequate use of certain, mostly primitive defense mechanisms, hinders the group of alcohol dependent patients with malignant tumor of the oral cavity and oropharynx in surpassing the bodily expression of emotions. The second group of participants (alcohol addicts) was less traumatized than the first group. Even though these participants were fixated at the oral stage of development, they managed to develop defense in the form of mental mechanisms that allowed for development of subsequent models of partial anxiety relief (through the stimulation of the oral cavity by alcohol intake and anxiolytic effect produced by alcohol) and thereby protected their bodies. In this case, primary objects were, to a certain extent, stimulating for the development of defenses formed in the early period<sup>59-60</sup>. This finding shows that development of primitive defense mechanisms is as necessary and important as the development of neurotic and mature mechanisms. In other words, it proves that all defense mechanisms have their role and importance during psychological development  $^{45,62\text{-}63}.$ Furthermore, inadequate relations in early childhood produce destructive effects on both the body and the

Limitations of our research can be found in a relatively small number of participants and in the use of only one model of assessing defense mechanisms.

Further researches should use more instruments for assessing defense mechanisms and early childhood trauma. Additionally, similar researches should be conducted with patients suffering from malignant tumors of other localizations.

#### Conclusion

Psychological factors play a role in development of malignant tumor of the oral cavity and oropharynx through emotional experiences, the quality of family relations in the early childhood and the set defense mechanisms used by a person.

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## REFERENCES

1. MUKERJI SS, DUFFY SA, FOWLER KE, KHAN M, RONIS DL, TERRELL JE, Otolaryngol Head Neck Surg, 136 (2007) 536. — 2. MC CAFFREY JC, WEITZNER M, KAMBOUKAS D, HASELHUHN G, LA-MONDE L. BOOTH-JONES M. Otolarvngol Head Neck Surg. 136 (2007) 92. — 3. DUFFY SA, RONIS DL, VALENSTEIN M, FOWLER KE, LAM-BERT MT, BISHOP C, TERRELL JE, Psychosomatics, 48 (2007) 142. 4. FREEDMAN ND, SCHATZKIN A, LEITZMANN MF, HOLLENBECK AR, ABNET CC, Br J Cancer, 96 (2007) 1469. — 5. HUMPHRIS G, Head and neck cancer. In: GEOFFREY L, GUTHRIE E (Eds) Handbook of Liaison Psychiatry (Cambridge University Press, New York, 2007). — 6. MC KECHNIE A, ROBINS RA, ERMIN O, Surgeon, 2 (2004) 187. — 7. SKO-BIĆ H, SINANOVIĆ O, SKOBIĆ-BOVAN N, IVANKOVIĆ A, PEJANO-VIĆ-SKOBIĆ N, Coll Antropol, 34 (2010) 29. — 8. MIŠKULIN M, PET-ROVIĆ G, MIŠKULIN I, PUNTARIĆ D, MILAS J, DAHL D, RUDAN S. Coll Antropol, 34 (2010) 1315. — 9. CHANG HW, LING GS, WEI WI, YU-EN AP, Cancer, 101 (2004) 125. — 10. GREGUREK R, Maligne bolesti. In: GREGUREK R (Ed) Suradna i konzultativna psihijatrija (Školska knjiga, Zagreb, 2006). — 11. GREGUREK R, BRAŠ M, ĐORĐEVIĆ V, STRAHI-NJA-RATKOVIĆ A, BRAJKOVIĆ L, Psychiatr Danub, 22 (2010) 227. — 12. MASSIE MJ, GREENBERG DB, Oncology. In: LEVENSON LJ (Ed) Textbook of Psychosomatic Medicine (American Psychiatric Publishing, Washington, 2005). — 13. PASNAU OR, FAWZY IF, SKOTZKO CE, ST ROUSE BT, WELLISCH KD, HOFFMAN KA, Surgery and Surgical Subspecialities. In: RUNDELL RJ, WISE GM (Eds) Textbook of consultation--liaison psychiatry (American Psychiatric Publishing, Washington, 1996). - 14. GRASSI L, SABATO S, ROSSI E, BIANCOSINO B, MARMAI L, Psychother Psychosom, 74 (2005) 100. — 15. FAWZY I, GREENBERG DB, Oncology. In: RUNDELL RJ, WISE GM (Eds) Textbook of consultation-liaison psychiatry (American Psychiatric Publishing, Washington, - 16. HAMAN KL, J Support Oncol, 6 (2008) 155. SANEIN KA, MUSGOROVE BT, BRADBURY E, J Craniomaxillofac Surg, - 18. MEHANNA HM, DEBOER MF, MORTON RP, Clin Otolaryngol, 33 (2008) 83. — 19. LEWELLYN CD, MCGURK M, WEIN-MAN J, Oral Oncol, 41 (2005) 440. — 20. PETTI S, Oral Oncol, 45 (2009) 340. — 21. BLANCK G, BLANCK R, Ego-psihologija (Biblioteka psiha, Zagreb, 1985), -22. GABBARD GO, Am J Psychiatry, 149 (1992) 991. 23. JADOULLE V, OGEZ D, ROKBANI L, Bull Cancer, 91 (2004) 249. -24. MCDOUGALL J, The staging of the Irrepresentable: »A Child is Being Eaten«. In: MCDOUGALL J (Ed) Theatres of the mind - Illusion and Truth on the Psychoanalytic Stage (London Free Association Books, Lon-- 25. GRAOVAC M, PERNAR M, MORO LJ, PETRIĆ D, RU-ŽIĆ K, GIROTTO I, FRANČIŠKOVIĆ T, Coll Antropol, 30 (2006) 75. -26. FREUD S, The neuro-psychoses of defense, In: STRACHEY J (Ed) The Standard Edition of the Complete Works of Sigmund Freud (Hogarth Press, London, 1972). — 27. Diagnostic and Statistical Manual of Mental Disorders (4th ed.) (DSM-IV), American Psychiatric Association (American Psychiatric Association, Washington DC, 2000). — 28. PLUTCHIK R, KELLERMAN H, CONTE HR, A structural theory of ego defenses and emotions. In: IZARD CE (Ed) Emotions in personality and psychopathology (Plenum Press, New York, 1979). — 29. LAMOVEC T, BELE-POTO-ČNIK Z, BOBEN D, Revised Questionnaire of Life Style and Defense Mechanisms (according to Kellerman), (Produktivnost - Centar za psihodijagnostička sredstva, Ljubljana, 1990). — 30. VAILLANT GE, BOND M, VAILLANT CO, Arch Gen Psychiatry, 43 (1986) 786. — 31. VIRAG M, Maligni tumori. In: BAGATIN M, VIRAG M (Eds) Maksilofacijalna kirurgija (Školska knjiga, Zagreb, 1991). — 32. The International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10) - Classification of mental and behavioral Disorder (World Health Organization, Geneva, 1994). — 33. SHEEHAN DV, LECRUBIER Y, SHEEHAN KH, AMORIM P, JANAVS J, WEILLER E, HERGUETA T, BAKER R, DUNBAR GC, J Clin Psychiatry, 59 (1998) 22. — 34. SHEE-HAN D, LECRUBIER Y, HARNETT-SHEEHAN K, JANAVS J, WEILL-ER E, BONARA LI, KESKINER A, SCHINKA J, KNAPP E, SHEEHAN MF, DUNBAR GC, European Psychiatry, 12 (1997) 232. — 35. JONSON--REID M, PRESNALL N, DRAKE B, FOX L, BIERUT L, REICH W, KA-NE P, TODD RD, CONSTANTINO JN, J Am Acad Child Adolesc Psychiatry, 49 (2010) 321. - 36. MILNE BJ, CASPI A, HARRINGTON H, POUL-TON R, RUTTER M, MOFFITT TE, Arch Gen Psychiatry, 66 (2009) 738. 37. THORBERG FA, YOUNG RM, SULLIVAN KA, LYVERS M, CON-NOR JP, FEENEY GF, Addict Behav, 36 (2011) 427. — 38. ZEIGLER--HILL V, PRATT DW, Journal of Psychiatry, Psychology and Mental Health, 1 (2007) 1. — 39. LIPSCHITZ DS, KAPLAN ML, SOREKENN JB, Psychiatric Services, 47 (1996) 189. — 40. ARNOLD RP, ROGERS D, COOK DA, BMJ, 300 (1990) 705. — 41. PETERS KR, MALTZMAN I, VILLONE K, Int J Addict, 29 (1994) 1259. — 42. MONCRIEFF J, DRUMMOND DC, CANDY B, CHECINSKI K, FARMER R, Br J Psychiatry, 169 (1996) 335. 43. ARIAS I, JOHNSON P, J Interpers Violence, 4 (1998) 298. -RENN P, Attach Hum Dev, 4 (2002) 294. — 45. CREAMER M, O'DONELL M, Curr Opin Psychiatry, 2 (2002) 163. — 46. YEHUDA R, DAVIDSON J, Posttraumatic stress disorder clinician's manual, (Science press, London, - 47. CONTE HR, PLUTCHIK R, DRAGUNUS JG, The measurement of Ego defences in Clinical Research. In: HENTSCHEL U (Ed) Defense Mechanisms - Theoretical, Research and Clinical Perspectives, (Elsevier, London, 2007). — 48. ROHSENOW DJ, ERICKSON RC, O'LEARY MR, Int J Addict, 13 (1978) 403. — 49. ROHSENOW DJ, O'LEARY MR, Int J Addict, 13 (1978) 213. — 50. VALLIANT GE, American Psychologist, 55 (2000) 89. - 51. FIGER A, KREITLER A, KREITLER M, INBAR M, Gastrointestinal Oncology, 4 (2002) 81. — 52. SERVAES P, VINGER-HOETS AJJM, VREUGDENHIL G, KEUNING JJ, BROEKHUIJSEN AM, Behav Med, 25 (1999) 23. — 53. GRULKE N, BAILER H, TSCHUSCHKE V, BUNJES D, ARNOLD R, DENZIGER R, KAECHELE H, Archives of Psychiatry and Psychotherapy, 3 (2001) 5. — 54. HUMPHRIS GM, OZA-KINCI G, Int J Surg, 4 (2006) 37. — 55. LYDIATT WM, MORAN J, BUR-KE WJ, Clin Adv Hematol Oncol, 7 (2009) 397. — 56. WOOD S, BISSON JI, Br J Oral Maxillofac Surg, 42 (2004) 149. — 57. SIFNEOS PE, Psychother Psychosom, 22 (1973) 255. — 58. AARSTAD HJ, HEIMDAL JH, AARSTAD AK, OLOFSSON J, Acta Otolaryngol, 122 (2002) 892. MARCHIORI E, LOSCHI S, MARCONI PL, MIONI D, PAVAN L, Alcohol Alcohol, 34 (1999) 396. — 60. KNOP J, PENICK EC, JENSEN P, NICKEL EJ, GABRIELLI WF, MEDNICK SA, SCHULSINGER F, J Stud Alchocol, - 61. PENICK EC, KNOP J, NICKEL EJ, JENSEN P, MANZARDO AM, LYKKE-MORTENSEN E, GABRIELLI WF, J Stud Alcohol Drug, 71 (2010) 685. — 62. MC WILLIAMS N, Psychoanalytic Diagnosis - Understanding Personality Structure in the Clinical Process, (The Guilford Press, New York-London, 1994). — 63. EHLERS W, CZOGALIK C, Psychother Psychosom, 42 (1984) 156.

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# MEHANIZMI OBRANE U OVISNIKA O ALKOHOLU SA ZLOĆUDNIM TUMOROM USNE ŠUPLJINE I OROFARINKSA

## SAŽETAK

Utjecaj psiholoških čimbenika u razvoju zloćudnog tumora usne šupljine i orofarinksa kod alkoholičara gotovo je potpuno neistražen. Cilj ovog rada bio je istražiti rane obiteljske okolnosti i razlike u korištenju obrambenih mehanizama bolesnika oboljelih od zloćudnog tumora usne šupljine i orofarinksa koji su ujedno ovisnici o alkoholu u odnosu na alkoholičare koji nisu oboljeli od zloćudnog tumora i zdravu populaciju. Ispitan je pedeset jedan pacijent, ovisnik o alkoholu obolio od zloćudnog tumora usne šupljine i orofarinksa u Kliničkom Bolničkom Centru Rijeka u periodu 2005–2009. godine. Usporedne skupine bile su skupina alkoholičara i zdrave populacije istog broja ujednačene po dobi, spolu i naobrazbi. Primjenjen je opći demografski upitnik, MINI (Mini International Neuropsychiatric Interview) i Upitnik životnog stila i obrambeni mehanizmi (ŽS). Ispitne skupine su se značajno razlikovale po teškom djetinjstvu (p<0,001) uz zlostavljanje (p=0,004). Ovisnici o alkoholu oboljeli od zloćudnog tumora usne šupljine i orofarinksa znatno su manje koristili primitivne obrane regresiju (p=0,004) i premještanje (p=0,013) u odnosu na alkoholičare koji su znatno više koristili neurotske obrane kompenzaciju (p=0,005) i intelektualizaciju (p<0,001). Najranija emocionalna iskustva i kvaliteta obiteljskih relacija utječu na razvoj obrambenih mehanizama a to su psihološki čimbenici u razvoju zloćudnog tumora usne šupljine i orofarinksa.