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Obsessive-compulsive symptoms, depressiveness and anxiety in the course of anorexia nervosa. Own suggestions regarding their understanding in the light of adolescence.

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Summary

Aims and the studied group. The aim of the present paper is to assess the correlations between the studied group of anorexia nervosa (AN) patients and the control group for the presence and intensification of obsessive-compulsive symptoms, depressive symptoms and anxiety during a 6-month observation. 50 AN patients aged 12.5-24 and 20 healthy control group girls aged 18-19 participated in the study. The AN diagnosis was based on ICD-10 and DSM-IV criteria.

Results. The assessment of intensification of obsessive-compulsive symptoms did not reveal a statistically significant difference between the studied groups. There was a statistically significant correlation of depressive symptoms in AN patients upon admission to the Ward as well as after 6 months of treatment. There was also a statistically significant intensification of anxiety as a state in AN patients upon admission to the Ward and after 2 months of treatment. Finally, there was a statistically significant intensification in anxiety as a trait in AN patients but only upon admission to the Ward.

Conclusions. 1. Extra caution is recommended when making a double diagnosis, i.e. AN and obsessive-compulsive disorder, AN and depression or AN and anxiety disorder keeping in mind the diagnostic criteria. 2. Depressive, anxiety and obsessive-compulsive symptoms are not specific for all diagnosed AN patients. The fact that similar depressive, obsessive-compulsive and anxiety symptoms were present in both AN patients and in the control group may suggest the presence of adolescence-specific psychic manifestations, rather than AN-specific co-occurring symptoms.

Adolescence / depression / depressiveness / anxiety / anorexia nervosa

INTRODUCTION

Adolescence in the psychodynamic sense and from the systemic perspective.

Anorexia nervosa (AN) usually appears in the period of adolescence. Adolescence should be considered in the context of individual factors (personality factors), environmental factors (socio-economic) and family factors. In the perspective of the structural family therapy, the families of AN patients manifest the following characteristic features: emotional entanglement, over-protectiveness, low conflict tolerance, rigidity and involvement of a child into the parental conflict [1].

Entanglement, over-protectiveness and rigidity seem to be of crucial significance when it comes to the tasks an adolescent has to face. These tasks, which were defined by Behaviourist [2], are as follows: achievement of personal independence, development of attitudes against social groups and institutions, achievement of new, more mature relations among the peers of both sexes, formation of a male or female role,

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achievement of emotional independence of parents and other adults, preparation for marriage and family life, preparation for a professional career and independence, development of an internal system of values and the pursuit of a socially responsible attitude.

Parental attitude should facilitate the achievements of tasks an adolescent has to face so the separation-individualization process commenced in the period of childhood could be completed without the feeling of guilt on either side. Parental attitudes which make the adolescence process more difficult include the following: extensive submission and acceptance against criticism of an adolescent and excessive parental condescension with a desire to artificially maintain old norms and rules. On the other hand, in the light of the tasks an adolescent has to face, especially the tasks consisting in modification of an ideal picture of a parent into a more realistic picture of "good enough parents", the creation of a more realistic and mature "picture of myself", finding a compromise between the real and ideal body as well as taking responsibility of own sexual desires, together with making a mature choice of a sexual object seem to be most important in the process of adolescence.

Adolescence is a process of changes on various levels (biological-psychological), hence it is a turning point for the young person and his or her parents. This is one of the most important and most difficult life crises of a human being. This is the time which necessitates the creation and activation of new adaptation structures and defence mechanisms adequate to the ongoing changes, both internal and external. Defence mechanisms against these difficult tasks are initiated which – according to the psychotherapists – are characteristic attitudes for earlier developmental periods.

External adolescence manifestations, induced by the internal conflicts and changes within the psychological structure of an adolescent, are as follows: manic, grandeur mood as a negation of own fears as to the lack of competence, helplessness and the "loss" of caring parents, the change of an idealizing attitude towards parents into the criticism of the parents and other adults, undertaking actions stressing self-independence and testing of own capabilities, questioning observations and beliefs, as well as opinions adopted from parents and other adults in order to shape own conscience and the system of values.

Those who are engaged in the work with adolescents are familiar with the fact that the acceptance of parental beliefs must, at least partially, be internally destroyed so that an adolescent could work out his or her own values. Therefore, rebellion and resistance of a young person against the values offered by "important adults" prove to be necessary in order to create a framework of self-identity.

Other external manifestations of adolescence induced by internal conflicts and changes within the psychological structure of an adolescent include: a depressive, reparation al concern about parents as an attempt to deal with guilty consciousness for the destructive attacks (real or imagined) against parents, which in the psychological reality is reflected in the form of depressiveness, a tendency to melancholy or the feeling of anxiety or fear in an adolescent. It is common during this period of life to find substitutes of models to follow and admire within the search of substitute objects of idealization and identification out of the family, which is necessary to acquire a complete, normal picture of a parent, which in turn is a necessary condition for a safe separation.

Changes in the scope of own physicality, psychology and a mixture of various emotions regarding them provoke a young person to focus on himself or herself. Although a young person sinks in an abyss of uncertainty as to his or her own value, physical appearance, place on the earth and others, a temporary feeling of safety is achieved through attributing great significance to the concept of one's self. This is commonly referred to as the adolescent narcissism [3]. The investment of attention into one's self and one's own body is accompanied with a simultaneous withdrawal, although temporary, of the love towards external objects and people. In real life it can be observed when a young person temporarily withdraws from social interactions and is interested in him- or herself only. They withdraw in order to regain the feeling of themselves as someone special and then open up again to discover new, pleasant ways of initiating relations with friends and the world. The demythologisation of these alternate processes of going out and in to withdrawal can be observed in AN pa-

tients, when we deal with a narcissistic Catherine within one's own body.

At the same time, a strong ambivalence within the scope of affect, impulses and behaviour can be observed. Hence frequent changes within the following dimensions: love – hate, activeness – passiveness, masculinity – femininity, fascination – indifference, dependence – independence, as well as regression to the primitive, extreme emotional states of everything – nothing, good – bad (splitting). There also occurs a shift from an arrogant anger and the feeling of grandeur towards the feeling of helplessness and the desire of dependence, as well as experiencing of an intense sadness connected with a definite and final resignation from the practical and psychological dependence on parents.

Depression vs. depressiveness

In the current literature it is more common to come across the opinion based on theoretical assumptions of the unity of all the affective disorders, yet they should be differentiated from sadness and despair of a child or an adolescent as a response to both stressing and traumatic experience [4]. Disorders of a depressive picture appearing in adolescence are classified in ICD-10 and DSM-IV in the affective disorders category, behavioural and emotional disorders, photogenic or post-traumatic disorders, depending on the context [5]. At the same time, there are situations, when the depressive symptoms do not present a depressive syndrome picture, but they remain at the level of single symptoms frequently accompanying another, basic disorder of psychological nature. It should be remembered that in order to diagnose a depression of a mild to severe intensification, specific diagnostic criteria must be met, both within the ICD-10 and DSM-IV classifications [6, 7].

According to Kępiński, juvenile depression constitutes a separate syndrome which consists in mood disorders, anxiety, behavioural disorders and excessive auto-destructive intensification. These symptoms may occur in various configurations as apathetic-abound, rebellious, surrendering or labile. Clinical symptoms of juvenile depressions include: mood disorders in the form of low mood or dysphoria, increased anxiety level, fear about the future. Cognitive sphere disorders are usually related to the difficulties with functioning in the role of a student with school failures, the feeling of low value, the belief in the inevitability of a failure. These are understood as mistaken cognitive stereotypes (not necessarily fixed), and a decreased activity level can be masked with dysphoria and behavioural disorders. The most frequent symptoms of juvenile depression are behavioural disorders and auto-destructive behavioural disorders [4].

Depressiveness is temporary, experienced by the majority of adolescents and results from the intensification of the emotional life during adolescence. With the excessive symptoms intensification and functioning disorders it can achieve a clinical level which requires treatment.

In the discussed study, the depression indicator was the feeling of the studied patients of a presence of symptoms which are treated as depressive symptoms. It can be assumed that with a high intensification of depressiveness during the clinical examination, depression can be diagnosed.

From the analytical point of view, depression is an expression of depressive mechanisms of identity functioning, manifested by depressiveness which can be noticed both in the style, and in the way of life. Depressive lifestyle, depressive choices or fate, which are connected with specific mechanisms, do not need to be accompanied by perceptible depression symptoms. Where the depressive mechanisms dominate, certain specific features can be observed in the style of the psychic functioning; therefore regardless of the stimulus, which is a triggering factor, defensive mechanisms are always the same. In the case of depression, the loss is connected with the emotional aspect of an object, i.e. our internal object, and not the reality to such an extent. A consequence of the loss of a real object is grief and sorrow, and of an internal, "private", subjective object – a depressive reaction. The depressive picture is connected with the loss of self value and self respect, as well as an intense feeling of guilt. The latter is accompanied by auto-depreciation. They are the consequences of aggression directed at the internal object, i.e. at oneself. The most severe form of this is suicide, treated as a form of internal object homicide.

The feeling of guilt is linked with the feeling of anxiety. Anxiety is treated as a factor being an element of self-preservation instinct, thus necessary for life. Depressive patients (meaning – suffering from depression) are those who have never forsaken a depressive position, so they live depressively at all times. This means that despite adolescence and the development of cognitive functions their defensive mechanisms still remain the same and they have never left the depressive position. Patients who have not left the depressive position present a tendency to a disturbed balance between good and evil objects. This imbalance is a consequence of persistent, unchanged, developmentally primary, destructive tendencies which originate from the death instinct – these are the primary: greed, envy and hostility [8, 9].

Anxiety as a state and trait

Anxiety is an ambiguous term and many authors dealing with this problem try to define anxiety and list specific features of anxiety reactions in various ways. However, the majority of authors agree that anxiety is a group of emotional reactions released by the external or internal stimuli. Characteristic features of these reactions are as follows:

1. They are of a specific, unpleasant nature, which is known to almost everybody from our own experience.
2. A person experiences them as something unpleasant, persistent, something he or she cannot get rid of.
3. Most of the people feel helpless facing them and have the feeling of their irrationality.
4. They are connected with, or triggered by physiological reactions of the organism [10].

Fear is an emotion which, depending on the use and intensity, can be pathological, and can (but does not have to) create pathologic structures. It can be a feeling which, apart from creating the anxiety symptomatology, can also be a natural regulator of human functioning in his or her environment.

In this paper, the authors refer to the concept of anxiety as a state and as a trait, the author of which is an American psychologist Charles D. Spielberg er. Based on the accepted theoretical model, Spielberger et al. developed a questionnaire for anxiety assessment: State–Trait Anxiety Inventory (STAI) [11]. Anxiety is a symptom which accompanies numerous psychological disorders, therefore the evaluation of its intensification and an attempt to distinguish between the anxiety closely connected with the psychopathological picture of the disorder and a permanent individual predisposition is of an extreme importance. The present study investigates the occurrence of anxiety as a state and as a trait according to Spielberger's theory. Anxiety as a state is defined as a subjective, consciously perceived feeling of fear and tension which is accompanied by the activation or agitation of the autonomous nervous system. On the other hand, anxiety as a trait is defined as a motif or acquired behavioural disposition which makes an individual susceptible to perceiving a wide range of objectively harmless situations as threatening and to react to them with the anxiety states disproportionately strong as contrasted with the size of an objective danger [12].

Obsessive-compulsive syndrome, obsessive--compulsive symptoms vs. obsessive-compulsive personality

Obsessive-compulsive syndrome (ZOK – F42), according to the ICD-10 classification, is diagnosed when the diagnostic criteria characteristic for the obsessive-compulsive syndrome are met [7]. It ought to be remembered that existing symptoms should be present in a patient's life for at least one hour a day and should significantly disturb his or her widely understood activeness. Looking at the problem of defence from the obsessive-compulsive symptoms perspective, in some of the AN patients the defensive mechanisms are of a more mature, typical for a neurotic identity structure nature. They include: denial, suppression, idealization, projection and compensation. Therefore, the female patients present clinical characteristics of either a hysterical or a obsessive-compulsive identity. These patients are characterized by a lowered self-esteem, perfectionism and anxiety. In order to improve their self-esteem, reduce the feeling of lower value and reduce anxiety, they aim at

achieving an ideal – thus extremely slim figure. In this group of female patients one may come across an individual who likes cooking for the whole family and who controls whether all have eaten up. On the other hand, such patients function better in the society than those who manifest the "borderline" or "psychotic" type of anorexia nervosa. Symptoms connected with the clinical picture of anorexia nervosa provide the patients with secondary advantages which are characteristic for neuroses, but also there comes to a drastic body mass decrease and forced hospitalization more frequently than in the case of the two remaining types. Taking into consideration the whole clinical picture, as well as the activation of defence mechanisms, the prognosis in this group of AN patients seems to be the best [13].

AIM OF THE STUDY

The aim of this paper is to investigate the dependence between female peers in the period of adolescence: a group of girls suffering from AN and a reference group of healthy girls in the scope of the intensification of the obsessive-compulsive symptoms, depressiveness and anxiety.

MATERIAL AND METHOD

The study lasted 6 months. For two months the study covered 57 AN patents aged 12.5 to 24 (from the early adolescence to adulthood). However, after two months of treatment 7 girls were excluded from the study (they did not report for check-ups after 3 months of treatment), therefore in the 6-month observation 50 patients remained with complete data and tests results of all examinations, i.e. upon admission to the Ward, and after two, three and six months of treatment. The anorexia nervosa diagnosis was done on the basis of the ICD-10 and DSM-IV classification [6, 7]. Data regarding the disease and its course were obtained on the basis of the interview with the patient, her parents or legal guardians, as well as on the basis of the psychiatric, neurological and physical examination of each patient. All the patients were hospitalized in the Developmental Age Psychiatry Ward of the Paediatric Centre in Sosnowiec, Poland for two to three months, and afterwards they continued the therapy in the out-patient clinic. During hospitalization they were on the 2500 kcal/day diet, which consisted of 5 meals with regular meal times. Upon leaving the Ward, the patients covered with the study were informed about the necessity of maintaining the applied diet, both in terms of quality, quantity and meal times. BMI was calculated for each patient, as well as the obsessive-compulsive symptoms on the basis of the Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS) and the depressiveness intensification on the basis of Hamilton's Depression Scale. Intensification of the anxiety as a state and trait was calculated on the basis of the Spielberger's STAI C.D. Questionnaire. The examinations were repeated four times during the 6-month period in the following time intervals: 1st test – upon admission, 2nd test – after 2 months, 3rd test – after 3 months and the 4th test – after 6 months.

Those of the patients who during the interview or psychiatric examination declared suicidal attempts were excluded from the study. Simultaneously, in each patient included in the studied group, the symptoms and problems reported by the patient, observed by the medical personnel during hospitalization, as well as reported by the parents or guardians, were analysed. The treatment during hospitalization included psychotherapy applied to the patients and their families. Each patient was in the following forms of psychotherapy: individual, group and family therapy in the following paradigms: behavioural-cognitive, psychodynamic and systemic, as well as psychoeducation, therapeutic society, and within the art therapy psycho-drawing, music therapy with the elements of choreography were applied.

Pharmacological treatment was not applied, except for an immediate, incidental application of a sedative.

In the out-patient treatment, regardless of the doctors' and therapists' recommendations, not all the patients were covered with complex therapies. Some of the patients participated only in individual or group therapy, and family sessions were irregular or the families did not continue this therapy at all.

After leaving the Ward, the patients reported for follow-up examinations at the Child and Adolescent Mental Health Centre of the Paediatric Centre in Sosnowiec, Poland, as well as for the examinations on the fixed dates at the Developmental Age Psychiatry Ward, where they had been hospitalized.

The reference group (K) consisted of 20 healthy (i.e. not suffering currently or in the past from eating disorders, with regular menstruations, not taking any medications) girls aged 18-19, on a normocaloric diet. In the reference group, the BMI was calculated, a single test with the Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS) was performed to evaluate the obsessive-compulsive symptoms, a single test with Hamilton's Depression Scale was performed to evaluate depressiveness, and the Spielberger's STAI C.D. questionnaire was performed to evaluate the intensification of anxiety as a state and trait.

A consent was granted to perform the study by the Bioethical Committee at the Silesian Medical University in Katowice, Poland. The patients and/or their legal guardians, as well as the girls from the reference group also expressed written consent to participate in the study.

Scales to evaluate the obsessive-compulsive symptoms, depressiveness and anxiety as a state and as a trait in the AN patients and in the reference group (K).

Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS)

The Yale-Brown obsession-compulsion scale (Y-BOCS) is used to identify and evaluate the degree of the obsessive-compulsive intensification. It is applied in the clinical examination and evaluation of the activity of the psychotropic drugs. It consists of a list of obsessions and compulsions and a proper scale [14].

In the picture of the anorexia nervosa course, there are obsessions regarding the physical appearance, figure, body proportions and diet – including caloricity of meals and their number. Similarly, compulsions occur regarding the need to prepare a meal, almost a ritual eating of the meals, compulsion to observe and measure the waist, hips, thighs, etc. Obsessions and/or compulsions connected with the body or diet do not constitute the grounds for the obsessive-compulsive syndrome diagnosis, because they are believed to accompany anorexia nervosa. These symptoms, reported or manifested by the female patients, were not taken into consideration while evaluating the intensification of the obsessive-compulsive symptoms. Using the Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS), only the obsessive and compulsive symptoms reported by the patients to occur currently were evaluated, but not the symptoms reported by the patients in the past. The examination was performed four times for each patient, upon admission to the Ward, after two, three and six months of treatment, and then compared with the reference group.

M. Hamilton's Depression Scale

Hamilton's depression scale is a widespread study tool for the clinical evaluation of antidepressant drugs (international standard) and for the diagnostics of depression intensification, especially of the endogenic type. It covers all the basic features of the endogenic depression syndrome and the chosen features of the psychogenic depression. The evaluation scale is 3- or 5-grade, and the evaluation criteria are precisely defined. The evaluation regards the current clinical state. In this study, the version of the scale evaluating 21 features was applied. It should be remembered that in the case of AN, only depressiveness accompanying the disease is evaluated. An extreme difficulty in the application of rigid diagnostic criteria should be stressed, i.e. the understanding in the nozologic-nozographic, and the necessity to relate them to the psychodynamic-systemic understanding. An obvious difficulty is connected with the evaluation of depressive symptoms, and specifically the degree of depressiveness in adolescents. Hamilton's Depression Scale, the tool – although helpful – commonly appreciated in the evaluation of the intensification degree of the already diagnosed depression may raise doubts as far as its application in the depressiveness evaluation is concerned. While using the Hamilton's Depression Scale in the AN patients, it should be remembered that some of

its points should not be taken into consideration, or, if used, special attention and understanding should be given when diagnosing the depressive syndrome. The points are as follows: 12 – regarding the alimentary tract, the lack of appetite and constipation, 14 – regarding the loss of libido, sexual drive and dysmenorrhoea, 16 – regarding the body mass drop, and 17 – evaluating criticism (appearance). In the opinion of the authors of this study these two aspects: the nozologic-nozographic and psychodynamic-systemic seem to be necessarily reconciled in the case of an adolescent in order not to stigmatise a young person and in the light of his or her symptoms to give him or her a chance and time for his or her individual development. Everyone who works with adolescents faces these difficulties and it is only a flexible approach – the one that takes into consideration the nozologic-nozographic paradigm but relates it properly to the age category – that gives a chance for a not-stigmatising diagnostic way of thinking.

C.D. Spielberger's Scale – "Self-evaluation Questionnaire" – to evaluate anxiety as a state and as a trait

Anxiety is a feeling which accompanies various psychological disorders, therefore the evaluation of its intensification is of an extreme importance. It is also important to attempt to differentiate the anxiety closely connected with the disorder psychopathological picture from a chronic predisposition of an identity [12].

While examining with the STAI test, two separate results are obtained: one for the X-1 scale, and the second for X-2 scale. STAI is a method enabling to perform the measurement quickly and easily.

Anxiety as a state is defined as a subjective, consciously perceived feeling of fear and tension which is accompanied by the activation or agitation of the autonomous nervous system [12]. In the part of the questionnaire which is related with anxiety as a state (STAI, X-1 form), by means of a list of statements, the patients describe themselves and show how they feel just now, i.e. in this particular moment (of filling in the questionnaire). The task of a tested person is to choose the answers which describe how he or she feels in a given moment.

Anxiety as a trait is defined as a motif or acquired behavioural disposition which makes an individual susceptible to perceiving a wide range of objectively harmless situations as threatening and to react to them with the anxiety states disproportionately strong as contrasted with the size of an objective danger.

C.D. Spielberger's Scale which evaluates anxiety as a trait (STAI, X-2 form) is also a subjective tool for self-evaluation performed by a patient. In this part, by means of a list of statements the patients describe and show how they feel in general [12].

Statistical analysis

The results were prepared by means of a licensed version of the Statistica 6.1 software. The database of clinical material was obtained after the analysis of the interview with the patient and her parents or guardians, psychiatric, physical and neurological examination of each patient, and the examination of the obsessive-compulsive symptoms occurrence with the Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS), Hamilton's Depression Scale and the STAI Spielberger's Scale evaluating anxiety as a state and as a trait. BMI was also calculated. The same procedure was applied for the girls from the reference group (K). The database was created in an Excel 2000 spreadsheet. For the statistical test the significance level of $P(alpha)<0.05$ was adopted. The independence test Chi^2, Levene's test, the NIR post-hoc and the t-Student test were also used in the statistical analysis.

RESULTS

BMI

Distribution of the body mass index (BMI) in the group of AN patients does not diverge from the norm. To analyse BMI value in the group of AN patients, the parameter was evaluated in 57 patients upon admission to the Ward and after two months of treatment, and in 50 patients after three and six months of treatment. The analysis of BMI value in the group of AN patients showed that its average value upon admission for 57 pa-

tients was 15.14 kg/m2 (SEM=0.188), after two months of treatment for the same number of patients it was BMI=15.82 kg/m2 (SEM=0.173), after three months of treatment for 50 patients it was BMI=15.30 kg/m2 (SEM=0.194) and after six months of treatment also for 50 patients it was BMI=18.03 kg/m2 (SEM=0.240).

In the light of the one-way analysis of variance preceded by Eleven's test which checks the homogeneity of the variance, a statistically significant BMI increase was found at the assumed test times (P<0.001).

When using the post-ho NIR test, a very significant BMI increase was found in the subsequent test times: after two months of treatment (P=0.0131) and between the third and the sixth month of treatment (P=0.0133), while in the remaining times (P<0.001).

The average BMI value in the reference group (K) was 21.21 kg/m2 (SEM=0.460). The AN group and the reference groups are not homogeneous as far as the BMI value is concerned in each time of the test (i.e. upon admission, after two, three, and six moths of treatment), because in each time the BMI in the AN group is statistically significantly lower than in the reference group – P<0.001 (t-Student test).

Obsessive-compulsive symptoms

The distribution of the obsessive-compulsive symptoms' intensification with the consideration of the number and percentage of the persons manifesting the above-mentioned symptoms in the AN group and the reference group is presented in Tab. 1. The evaluation was conveyed with the Children's Yale-Brown Obsessive-Compulsive Scale (CY-BCOS).

On the basis of the Chi^2 independence test, a statistically significant change was observed on the obsessive-compulsive symptoms intensification in the AN group in the period of the 6-month observation (P=0.017). While evaluating the obsessive-compulsive symptoms intensification with the Children's Yale-Brown Obsessive-Compulsive Scale (CY-BCOS), in the AN group and the reference group in the 6-month observation period, no statistically significant dependence was observed in the scope of the above-mentioned symptom intensification between both groups in the assumed test times. Upon admission to the Ward (P=0.0656 – the Chi^2 test), after two months of treatment (P=0.6506 – the Chi^2 test), after three months (P=0.8812 – the Chi^2 test) and after six months (P=0.6663 – the Chi^2 test). The evaluation of the obsessive-compulsive symptoms intensification in the assumed test times in the AN and reference groups is presented in Fig. 1.

Depressiveness

The distribution of the compulsive-obsessive symptoms taking into consideration the number and percentage of the persons manifesting it within the AN group as well as the reference group is presented in Tab. 2. The evaluation was carried out by means of the Hamilton Depression Scale.

On the basis of the Chi^2 independence test, a statistically significant difference was found in the intensification degree of the depressive symptoms in the AN group during the 6-month observation (P<0.001).

The analysis of the depressiveness intensification degree in the AN group and the reference group during the 6-month observation in the assumed test periods shows a statistically significant dependence of depressiveness intensification between the above-mentioned groups upon admission to the Ward, as well as after 6 months of treatment.

Both upon admission to the Ward and after 6 months of treatment, depressiveness intensification was higher in the AN group than in the reference group, with the p value respectively: P<0.001 and P=0.0342 (Chi^2 test).

The evaluation of the depressiveness intensification in the assumed test periods in the AN group and the reference group is presented in Fig. 2.

Anxiety as a state and trait

The distribution of the anxiety as a state intensification taking into consideration the number and percentage of the persons manifesting it within the AN group as well as the reference group is presented in Tab. 3. The evaluation was

Table 1. The distribution of the obsessive-compulsive symptoms intensification with the consideration of the number and percentage of the persons manifesting the above-mentioned symptoms depending on the degree of their intensification in the AN group and the reference group

Test time [months]	AN patients group		
	no. of persons	% persons	evaluation of intensification degree
upon admission	**32**	**55.14**	**subclinical**
	7	**12.28**	**mild**
	17	**29.83**	**moderate**
	1	**1.75**	**severe**
after two months of treatment	**35**	**61.40**	**subclinical**
	15	**25.32**	**mild**
	7	**12.28**	**moderate**
after three months of treatment	**32**	**64.00**	**subclinical**
	13	**25.00**	**mild**
	4	**8.00**	**moderate**
	1	**2.00**	**severe**
after six months of treatment	**37**	**74.00**	**subclinical**
	10	**20.00**	**mild**
	3	**5.00**	**moderate**
Test time [months]	Reference group (K)		
	no. of persons		no. of persons
upon admission	**13**	**65.00**	**subclinical**
	6	**30.00**	**mild**
	1	**5.00**	**moderate**

General result in the CY-BOCS Scale – evaluation of intensification degree: 0–7 subclinical; 8–15 mild; 16–23 moderate; 24–31 severe.

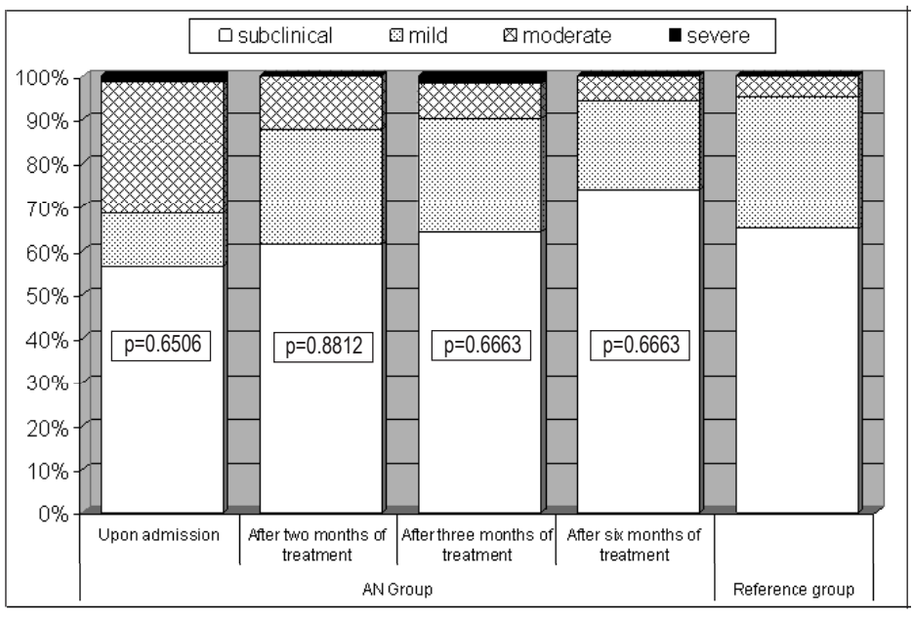

Figure 1. The evaluation of the obsessive-compulsive symptoms intensification in the assumed test times in the AN and ref erence groups.

Table 2. Distribution of depressive symptoms intensification with the consideration of the number and percentage of the persons manifesting the above-mentioned symptoms depending on the degree of their intensification in the AN group and the reference group.

Test time [months]	AN patients group		
	no. of persons	% persons	evaluation of intensification degree
upon admission	**0**	**0.00**	**without disorders**
	12	**21.05**	**mild depression**
	13	**22.81**	**moderate depression**
	23	**40.35**	**severe depression**
	9	**15.79**	**very severe depression**
after two months of treatment	**10**	**15.54**	**without disorders**
	19	**33.33**	**mild depression**
	17	**29.83**	**moderate depression**
	8	**14.04**	**severe depression**
	3	**5.26**	**very severe depression**
after three months of treatment	**15**	**30.00**	**without disorders**
	12	**40.00**	**mild depression**
	9	**18.00**	**moderate depression**
	5	**10.00**	**severe depression**
	1	**2.00**	**very severe depression**
after six months of treatment	**19**	**38.00**	**without disorders**
	20	**40.00**	**mild depression**
	3	**5.00**	**moderate depression**
	8	**15.00**	**severe depression**
Test time [months]	Reference group		
	no. of persons	% persons	evaluation of intensification degree
upon admission	**8**	**40.00**	**without disorders**
	5	**25.00**	**mild depression**
	6	**30.00**	**moderate depression**
	1	**5.00**	**severe depression**
	0	**0.00**	**very severe depression**

Depression intensification evaluation measured with the 17-point Hamilton Depression scale 0 – 7 without depressive disorders; 8 – 12 mild depression; 13 – 17 moderate depression; 18 – 29 severe depression; 30 – 52 – very severe depression

carried out by means of the Spielberger's STAI Self-Evaluation Questionnaire, the X-1 Form.

On the basis of the Chi^2 independence test, a statistically significant difference was found in the intensification degree of the anxiety as a state in the AN group during the 6-month observation $P<0.001$).

The analysis of the intensification degree of anxiety as a state in the AN group and the reference group during the 6-month observation, in the assumed test periods, shows a statistically significant dependence of anxiety as a state intensification between the above-mentioned groups upon admission to the Ward, as well as after 2 months of treatment. Both in the first and the second case, anxiety as a state intensification was higher in the AN group. Upon admission to the Ward, the value of P was $P<0.001$, while after the second month of treatment it was $P=0.0032$ (Chi^2 test). The evaluation of the inten-

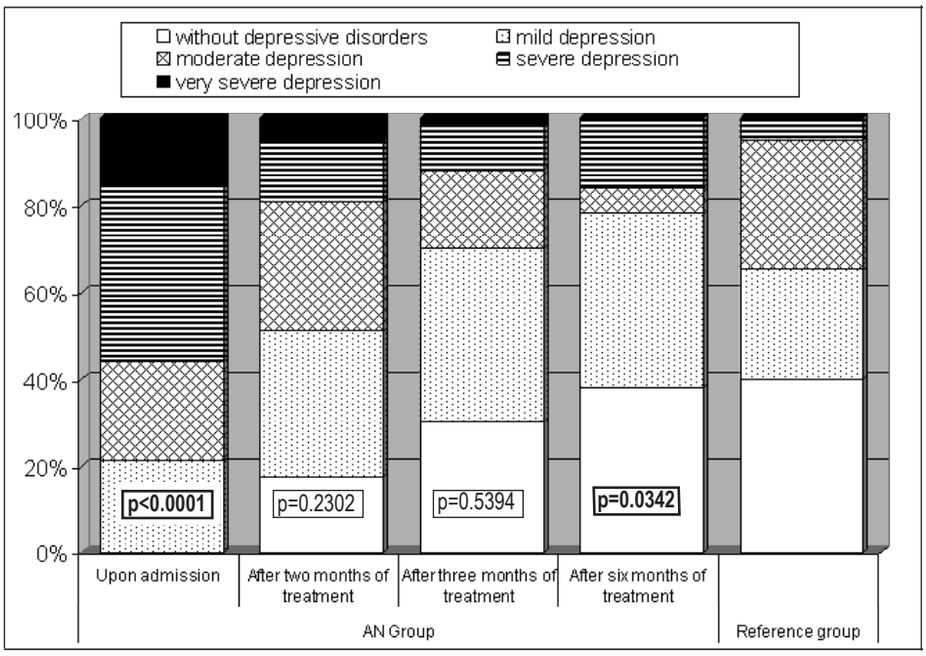

Figure. 2. The evaluation of the depressiveness intensification in the assumed test times in the AN and reference groups.

Table 3. The distribution of anxiety as a state intensification with the consideration of the number and percentage of the persons manifesting the above-mentioned symptoms depending on the degree of their intensification in the AN group and the reference group.

Test time [months]	AN Group		
	No. of persons	% persons	Evaluation of intensification degree
upon admission	**5**	**8.77**	**low**
	20	**35.09**	**average**
	32	**55.14**	**high**
after two months of treatment	**17**	**29.82**	**low**
	16	**28.07**	**average**
	24	**42.11**	**high**
after three months of treatment	**17**	**34.00**	**low**
	19	**38.00**	**average**
	14	**28.00**	**high**
after six months of treatment	**22**	**44.00**	**low**
	15	**30.00**	**average**
	13	**25.00**	**high**
Test time [months]	Reference Group		
	No. of persons	% persons	Evaluation of intensification degree
upon admission	**9**	**45.00**	**low**
	9	**45.00**	**average**
	2	**10.00**	**high**

Anxiety as a state intensification evaluation measured with the Spielberger Self-Evaluation Questionnaire STAI, X-1 Sheet;
1 – 4 stens: low result; 5 – 6 stens: average result; 7 – 10 stens: high result

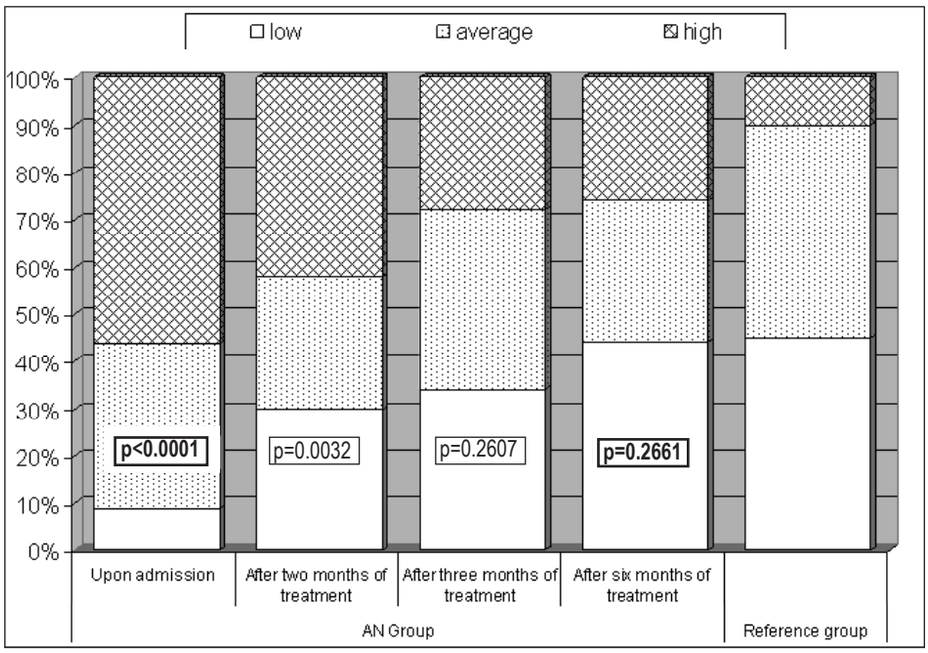

Figure 3. The evaluation of the anxiety as a state intensification in the assumed test times in the AN and reference groups.

Table 4. The distribution of anxiety as a trait intensification with the consideration of the number and percentage of the persons manifesting the above-mentioned symptoms depending on the degree of their intensification in the AN group and the reference group.

Test time [months]	AN Group		
	No. of persons	% persons	Evaluation of intensification degree
upon admission	**11**	**19.30**	**low**
	23	**40.35**	**average**
	23	**40.35**	**high**
after two months of treatment	**15**	**25.32**	**low**
	15	**25.32**	**average**
	27	**45.36**	**high**
after three months of treatment	**18**	**35.00**	**low**
	12	**24.00**	**average**
	20	**40.00**	**high**
after six months of treatment	**16**	**32.00**	**low**
	14	**28.00**	**average**
	20	**40.00**	**high**
Test time [months]	Reference Group		
	No. of persons	% persons	Evaluation of intensification degree
upon admission	**10**	**50.00**	**low**
	6	**30.00**	**average**
	4	**20.00**	**high**

Anxiety as a state intensification evaluation measured with the Spielberger Self-Evaluation Questionnaire STAI, X-2 Sheet; 1 – 4 stens: low result; 5 – 6 stens: average result; 7 – 10 stens: high result

sification degree of anxiety as a state in the assumed test periods in the AN group and the reference group is presented in Fig. 3.

The distribution of the anxiety as a trait intensification, taking into consideration the number

and percentage of the persons manifesting it within the AN group as well as the reference group, is presented in Tab. 4. The evaluation was carried out by means of Spielberger's STAI Self-Evaluation Questionnaire, the X-2 Form.

On the basis of the Chi^2 independence test, no statistically significant difference was found in the intensification degree of the anxiety as a trait in the AN group during the 6-month observation (P<0.368). The analysis of the intensification degree of anxiety as a trait in the AN group and the reference group during the 6-month observation, in the assumed test periods, shows a statistically significant dependence of anxiety as a trait intensification between the above-mentioned groups only upon admission to the Ward. Anxiety as a trait intensification was higher in the reference group (P=0.0261 – Chi^2 test). The evaluation of the intensification degree of anxiety as a trait in the assumed test periods in the AN group and the reference group is presented in Fig. 4.

statistically significantly lower during the entire study period as compared with the reference group (P<0.001, t-Student test, Tab. 1). A similar phenomenon was also observed by Otto et al. 9200(2001) [15].

The studies on the prevalence of eating disorders among patients diagnosed with the obsessive-compulsive disorder (OCD) show that app. 6-12% of such patients also manifest the symptoms suggesting the AN or bulimia nervosa (BN) diagnosis. Other studies determining the OCD prevalence among patients with eating disorders provide equivocal results: 15-30%, 7-10%, 35.7%, the lack of a statistically significant difference between the OCD prevalence in the AN, BN groups and the group of persons who do not manifest any eating disorders. In 33.3% of the studied patients with eating disorders (AN – the bulimic-purging form), the OCD symptoms were found, in 5.6% they were not connected with eating, and in 93.3% these were ob-

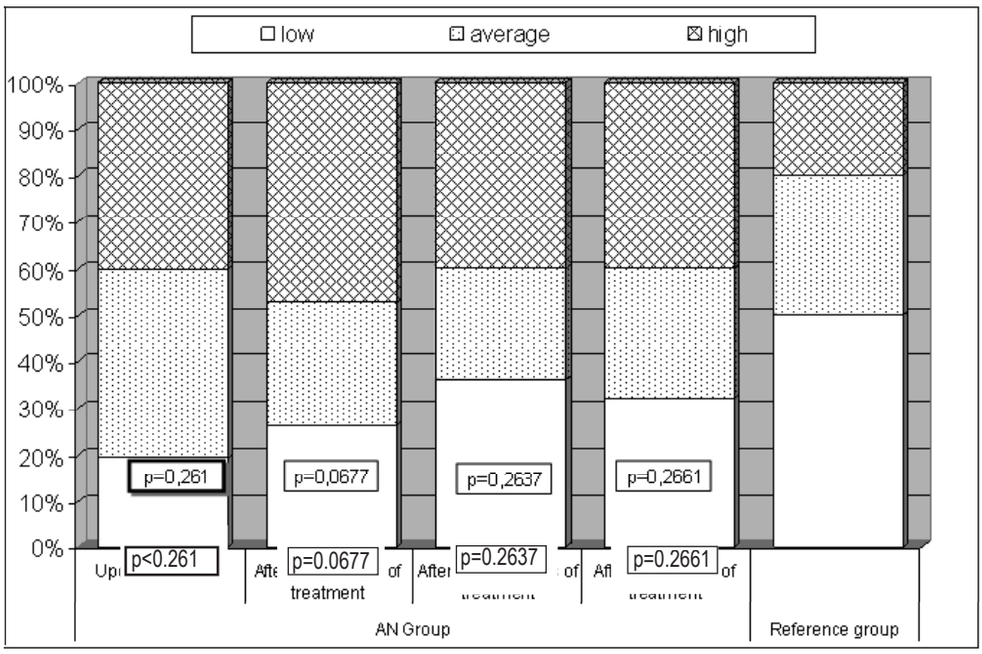

Figure 4. The evaluation of the anxiety as a trait intensification in the assumed test times in the AN and reference groups.

DISCUSSION

The carried-out study shows a statistically significant BMI increase in the AN group in the respective test times, as compared with the reference group. Despite the BMI increase in the group of AN patients, the BMI value remained

sessions and compulsions connected with eating, but the OCD diagnosis could not be made because they did not disturb the functioning of the studied persons. Among the healthy individuals, 5.6% of them experienced single, persistent thoughts connected with eating, and 15.6% experienced single, persistent thoughts not con-

nected with eating [4]. According to Łucka [16], the obsessive-compulsive disorders appeared in 13.3% of children with the restrictive form of AN (P<0.045), and the symptoms were not connected with eating.

During the 6-month observation of the AN patients, a statistically significant change of the obsessive-compulsive intensification (P=0.017) was observed towards the increase of those of the subclinical intensification, i.e. an actual regression of the above-mentioned symptoms, a decrease of the mild symptoms and regression of the severe ones. During the course of AN at all test times, the most frequently observed obsessive-compulsive symptoms were those of the subclinical intensification degree, i.e. clinically insignificant. Upon admission to the Ward 55.14% of the patients, and after six months of treatment up to 74% of patients did not manifest any clinically significant obsessive-compulsive symptoms. Therefore it can be stated that up to 74% of the female patients did not manifest any obsessive-compulsive symptoms after the 6-month treatment period. The obsessive-compulsive symptoms of a mild intensification degree were also present at all test times in the patients, and the percentage of the individuals manifesting them increased after two and three months of treatment, to decrease after 6 months of treatment from 26% to 20%. Similarly, at all test times, i.e. upon admission, after two, three and six months of treatment, the obsessive-compulsive symptoms of moderate intensification degree were also observed with the tendency toward the decrease of the percentage of persons manifesting them (from 29.83% upon admission to 6% of patients after 6 months). A severe intensification degree of the above-mentioned symptoms occurred only in one patient, which constitutes an inconsiderable percentage of 1.75%. In the reference group in 65% cases the obsessive-compulsive symptoms of the subclinical intensification were observed, and in 30% - mild (Tab. 1). No significant dependence of the results within this area was observed between the reference group and the AN patients. However, in both groups symptoms of various intensification degrees were observed. This result suggests the occurrence of compulsive behaviours and obsessive thoughts in the adolescents without any psychiatric diagnosis, which would rather point to the specific character of "coping with" during adolescence through this kind of the symptoms which constitute defence against difficulties experienced by a young person.

The disturbances of the character of persistent thoughts and/or activities which do not fulfil the diagnostic criteria of the obsessive-compulsive syndrome (OCD) are included in the OCD spectrum. Due to the character of symptoms and the type of CNS dysfunctions, the spectrum can be divided into three groups [17, 18]. One of these groups, in which the obsessive thoughts and/or compulsive activities concern a specific problem, includes Anorexia Nervosa. Observations made on the basis of this study confirmed that AN belongs to the obsessive-compulsive disorders spectrum, however, they did not show that AN was statistically significantly more frequently accompanied by the obsessive-compulsive syndrome. Pollice et al. (1997) showed that eating disorders intensify the obsessive-compulsive symptoms in patients, and the body mass increase does not lead to a complete regression of these disorders, but only decreases their intensification (yet not in the case of all patients) [19]. This confirms that the body mass loss cannot be considered a factor which induces or fixes the above-mentioned symptoms, but rather, at the most, a factor which co-exists with the other factors – of the psychological or individualistic nature. The occurrence of the obsessive-compulsive symptoms in the AN course regarding diet or the perception of one's body belongs to the AN picture and is included in the diagnostic criteria. With the understanding of these symptoms within the psychoanalytic context, it can be assumed that AN is a regression to the earlier developmental phases. The regression back to the latency stage manifests itself with the identification with one's own mother through passivity and submission. We should also bear in mind that an anorectic patient never rebels – which is typical for an adolescent – but only can split the ego into the unloved body and an idealized ego subordinated to mother. A consequence derived thereof is desexualisation, but also finding an area of self-control and independence (unfortunately, a sick one). Maintaining the feeling of autonomy takes place through the rejection to eat. On the other hand, however, eating control is the only, both real but first and foremost symbolic,

control available for the patient suffering from anorexia nervosa. It is also the only currently available form of aggression for the AN patients [20]. On the other hand, the obsessive-compulsive symptoms may be understood as a subconscious form of patient's defence against an even stronger regression, back to the oral stage, in which the manifested eating disorders may only constitute a group of the psychopathology symptoms. Patients in this group can be endangered even by the psychotic decompensation, i.e. the possibility of losing the differentiation of "I" – the object [20]. In the presented studied group, none of the patients decompensated psychotically during the course of the disease.

The affective disorders in children and adolescents are diagnosed on the basis of the criteria used in the diagnosis of adults.

Can we talk about depression in the case of children and adolescents, or should it rather be treated as a developmental reaction?

Should anorexia nervosa be treated as a set of symptoms and should it be defined and described interchangeably with depressiveness? [21].

Does depression develop secondarily to eating disorders?

According to Bomba et al. the similarity between patients suffering from depression and AN can be seen in the tendency to destroy one's own health, and the difference regards the way of thinking about the future – contrary to the depression patients, the AN patients with their school ambitions do plan their future, but they still see themselves as sick [22]. Leassle et al., while studying the AN and BN patients, stated a positive correlation between the depression intensification and cognitive functioning – the higher the level of eating disorders, the higher the score on the depression scale. The regression analysis showed that the dissatisfaction with one's own body is the strongest, single predicative of depression [22]. Halmi et al. (1991) recognized depressive disorders in 65.7% of AN patients during the ten-year catamnesis. Braun et al. (1994) recognized depressive disorders in 81.85% of the patients with the bulimic form of AN and in 41.2% of patients suffering from the restrictive form of AN. Komender et al. (1998) stated that 51% of the patients with appetite disorders complained about a periodic decrease of mood and/or anxiety disorders, and in 9% a significant intensification of depressive symptoms was manifested [23]. Łucka (2004) stated that depressive disorders were present significantly more frequently in patients with the restrictive form of AN than in the healthy individuals ($P<0.01$) [23]. Iniewicz (2004) stated a slight level of depression in 67% of AN patients, but also a slight level of depression in 30% of their healthy peers [22], while Rabe-Jabłońska (1996) confirmed depression in 7 AN patients (out of 30 studied patients) where 6 out of 7 AN patients suffered from the bulimic-purging form ($P<0.001$) [24].

Cooper summed up the observations of the authors working on the co-existence between the eating disorders and depression:

1. Depression rarely precedes eating disorders
2. Depression in various types of eating disorders occurs with various intensifications. It is more frequent in bulimia and bulimic form of AN, and is a secondary effect in regard to the feeling of losing control and helplessness.
3. Depression is much more frequent in the acute phase than in remission.
4. The depression pattern in eating disorders is different than the pattern found in "pure" depression
5. Despite the more frequent occurrence of depression among the family members of persons with eating disorders as compared with healthy individuals, a contrary dependence was not observed, i.e. a more frequent occurrence of eating disorders in the families of depression patients. The above-mentioned reports question the single pathogenesis of both the diseases [23].

In the studied group of patients upon admission to the Ward the depressive symptoms occurred in each patient, but the intensification degree was different. In 40.35% of the girls the intensification of the depressive symptoms in the severe degree occurred, a similar percentage manifested a moderate degree of intensification (22.81%), mild (21.05%), while 15.97% of patients manifested a very severe degree of intensification. Just after two months of treatment a decrease of percentage of patients was observed (14.04%) in which severe depressive symptoms occurred, and the decrease to 5.26% of patients with the intensification of very severe depressive symptoms. As compared with the evaluation upon admission to the Ward, the percent-

age of patients with mild depressive symptoms increased (up to 33.33%), as well as with moderate symptoms (up to 29.83%). However, there were also persons who did not manifest any depressive symptoms (15.54%). A similar tendency was also observed after three months of treatment. However, after six months of treatment, an increase of percentage of persons without any depressive symptoms was still observed (38%), and the percentage of persons with mild depressive symptoms remained at the same level as after three months of treatment (40%). Also, the percentage of patients with moderate depressive symptoms decreased, but the percentage of girls manifesting severe depressive symptoms increased (up to 16%) (Tab. 2). It should be noted that in the reference group, in 30% of girls moderate depressive symptoms were also observed and 5% (one person) manifested very severe symptoms. In the latter case a juvenile depression was diagnosed (according to the modern nomenclature in the ICD-10 classification – depressive conduct disorder). Garcia-Alba (2004) in 36% of the group of female adolescents with AN recognized a co-existing depression [25]. In this study none of the girls of the AN group was diagnosed with the depressive syndrome, therefore in this case we can only talk about a co-existence of depressiveness and AN. It should be remembered that the Hamilton Depression Scale, by means of which both the girls from the AN group and reference group were tested, constitutes only an auxiliary scale in the evaluation of the intensification of the already-diagnosed depression. The diagnosis of depression is stated on the basis of a characteristic clinical picture. In the AN group each girl was primarily diagnosed with anorexia nervosa, in the course of which depressive symptoms also occurred, yet they did not present a clinical picture of the depressive syndrome. It should be noted that in the girls from the control group, the depression symptoms were also present. As Bomba (2004) states, the epidemiological tests of the not-treated population of adolescents, which were conducted mainly in order to evaluate their general health, showed a wide prevalence of depression symptoms, although a great majority of the adolescents did not manifest any grounds for a depression diagnosis [4]. It can be assumed that in the AN group the observed nature of disorders is a result of developmental changes which constitute the substance of adolescence on the one hand, and on the other – the presence of a chronic disease with its limitations and consequences, as well as the need of hospitalization. After a thorough analysis of depression symptoms intensification in the reference group it was noted that they suggested a juvenile depression (depressive conduct disorder). The girls from the reference group manifesting depressive symptoms in the moderate degree complained about a mood decrease, periodic difficulties in school functioning (difficulties with concentration, attention, learning or even failures at school), as well as a periodic withdrawal from certain activities. The analysis of the depressive symptoms intensification in the AN group as compared with the reference group showed that the symptoms occurred statistically significantly more frequently upon admission to the Ward and after six months of treatment (upon admission $P<0.001$, after six months of treatment $P<0.05$) (Fig. 2). In our opinion this fact may be interpreted in the following way: firstly – the biggest group of girls remained hospitalized for two to three months. After three months of hospitalisation they were transferred to ambulatory treatment in which case, as it has already been mentioned, the psychotherapy was not conducted in a systematic manner, and AN – as any other disease – has its own natural course. Secondly – upon leaving the Ward, each patient had to "face" a totally different reality than that of the Ward. Usually, they resumed school duties, tried to reconstruct the destroyed – due to their illness – relations with their peers, as well as continuously tried to cope with the separation-individualization process. These tasks were difficult and sometimes the girls might not cope with each of them. Consequently this might have led to a decreased mood, and potentially a partial recurrence of symptoms connected with eating and intensification of depressive symptoms.

The understanding of depressiveness in AN from the psychoanalytical perspective can be connected with the regression to the latency phase or deeper, even to the anal phase. In the case of the former, due to the split ego into an idealized ego and the body which is not liked, the patient finds an area of self-independence. Yet the expense of the feeling of autonomy is

great – the rebellion manifests itself by refusal to eat, and as a consequence of the conflict being solved in this way, there comes to a distorted picture of the body as well as a low self-esteem. A deeper regression, into the anal phase, not only triggers the sadomasochistic tendencies, but also may be treated as a form of a partial suicide or destruction. Eating disorders usually start during adolescence. Physiological processes within the biological development are connected with the awakening of the sexuality of a growing-up girl and consequently a young woman. Biological development, which is manifested by a changing body, presents a danger for a girl suffering from anorexia nervosa in the form of an intensifying Oedipal conflict. The only – at this moment – unconscious form of defence is refusal to eat and consequently a progressive emaciation. Aggression is directed towards the body, which results in biological devastation, and at the same time further sexual development becomes impossible. Such a "defence" is necessary, otherwise a complete fusion with the mother can take place, which from the real perspective can lead to an inhibition of the secondary separation-individualization process. On the other hand, the emaciation, or even the devastation of the organism is an unconscious triumph of narcissism over the body and the omnipotence of a young, growing-up girl. Controlling the "bad" body in the defence mechanism of splitting protects the good, idealized ego. Ego splitting is a defence against the impulses coming from the id. Aggression directed at one's own body enables this control. As a result, this manner of solving the Oedipal conflict enables the AN patient to maintain a balance between the biological death and still stronger developmental tendencies. The AN patient autonomy is built on such am ill basis. In reality, looking at the tasks connected with adolescence, the separation-individualization process is inhibited, while the juvenile narcissism is not confronted and sexuality does not develop, thus the acceptance of womanhood with its all consequences does not take place. Should the problems of "individual" development overlap with the difficulties of the socio-economic nature of the present times, frequently connected with the family crisis, anorexia nervosa seems to be – at the unconscious level – the only form of protest, and simultaneously a form of a cry for help for a certain group of growing-up girls. On the other hand, depressiveness prevails in the group of the so-called healthy adolescents and results from the broadly-understood adolescence tasks which create a significant emotional pressure in the adolescent and force her to confront the reality thus leading to changes.

During the conference in Gotingen in 1965 the following 3 conclusions were made regarding AN:

1. Anorexia Nervous expresses the inability to undertake genital sexuality and to integrate the changes taking place during adolescence,
2. The main conflict takes place on the level of the body which is ill-treated and rejected, and not on the level of eating,
3. The structure of AN is not homogeneous with the structure of classic neurosis [26].

The change in the approach is related to the development of the psychoanalytical theory by Melanie Klein which perceives eating disorders as a pathology originating in the borderline structure and narcissism. Hildebrand Burch relates eating disorders with the disturbance in the self of the patient, and these difficulties are to reach back to the period of gaining one's mental autonomy in the separation-individualization process and are the consequence of peculiar programming of the child by the mother. These difficulties make it more difficult to solve the dilemmas of adolescence and are related to the separation of the self from the body. The predisorder defences of being perfect and pleasing the parents lead to the personification of those young people and preserve – despite their successes – the feeling of being worthless and helpless. AN comes as a response to these changes and is understood as a dramatic fight to regain the meaning, the expression of one's personality and the interpersonal effectiveness. This is a mechanism of narcissistic defence which is realized by manipulating the eating process and food types. The current gratification of a slim body may lead to a situation where the anorexic body line will no longer be the object of narcissistic gratifications of being special [26]. Family-based separation difficulties are typical in AN and on the individual level the AN patients have

a tendency to redraw from interpersonal contacts [26].

These different perspectives of perceiving AN seem to suggest AN may not be a homogeneous disorder entity [13] and maybe it should not even be considered as a nosologic entity at all. It stretches across the continuum based on the personality structure. On one end there is the neurotic personality, in the centre – the borderline personality and the psychotic personality on the other end. In the first one, the socio-cultural and family factors are of great importance, while in the last one maybe the biological ones are the most important [13].

When assessing the co-existence of anxiety disorders and AN, Rabe-Jabłońska (1996) found statistically higher (P<0.001) results on the Hamilton anxiety scale in 13 (out of 30) patients suffering from the bulimic AN type than in the patients suffering from the restrictive AN type; the highest results were among patients with co-existing OCD [24]. Blitzer et al. and Theander found phobias and other anxiety disorders in 13% of the patients suffering from eating disorders. Halmi et al. found anxiety disorders in 69% of the patients suffering from eating disorders. Bulk et al. found that 60% of AN patients suffered from anxiety disorders present in the past, as well as that in AN patients there were statistically significant more frequent cases of OCD, generalized anxiety disorders as well as separation anxiety [16].

Analysing anxiety as a state in AN patients during the 6-month observation, we found that it is statistically significantly more intense on admission to the Ward as well as after 2 months of treatment, when compared with the reference group (Fig. 3). However, a statistically significant change in anxiety as a state level was found among the AN patients during the observation P<0.001). In over 50% of the patients, the level of anxiety as a state was high on admission to the Ward. After two months of treatment, the percentage of patients with a high level of anxiety as a state dropped to 40%, while the percentage of those with a low level of anxiety as a state tripled (to over 30%). The change was proportional, i.e. the percentage of patients with a high level of anxiety as a state decreased, while the percentage of patients with a low level of anxiety as a state increased (Fig. 3). On admission to the Ward, the increased feeling of anxiety as a state may be related to the disease itself, when the situation of a chronic disorder may lead to increased anxiety. Also, being admitted to a ward and having to stay there for treatment is a new, unknown situation which may seem endangering. Also, anxiety and low mood often co-exist, so in a state of crisis (understood as an intensification in the course of the disease), sometimes it is necessary to introduce radical changes in the treatment environment in order to change the patient's symptoms. In our case, this change consisted of staying at the Ward as well as undertaking complex, systematic psychotherapy custom-designed for each particular patient. This situation is a new and unknown one, hence it may generate anxiety. During the entire stay at the Ward, the psychotherapy included working on the eating process as a symptom and helped reduce the anxiety, as well as obsessive thoughts and compulsive behaviour (both those related to meal preparation as well as persistent physical activities). One must also consider the findings of Police et al. (1997), who showed that eating disorders increase anxiety and the increasing body weight does not lead to its complete disappearance but only to its lowering [19]. Anxiety, so high at the beginning of the treatment, may also originate from the very high aspirations observed in AN patients (independent of their actual capabilities) as well as from a high level of subdued aggression, as observed by Padrewski et al. (1996) [27].

When analysing anxiety as a trait, it was only at the admission to the Ward that we found a statistically significant correlation between the AN patients and the reference group (Fig. 4). From the second month of treatment on, no such correlation was found. It should be noted, however, that the level of anxiety as a trait remained high throughout the check-ups during the treatment in a constant percentage of patients (pap. 40%), while at the same time the percentage of patients with a decreasing level of anxiety as a trait increased (Fig.4). This percentage of patients in whom the anxiety as a trait was observed throughout the treatment may suggest there is a characteristic group of AN patients in whom the anxiety is one of the basic personality features creating the specific psychopathology picture in this group. This

would suggest there is a subgroup of AN patients – as found in the literature by Jakubczyk et al. (2003) – suffering from the neurotic type of AN [13]. This hypothesis is confirmed by the statistical analysis which showed that the level of anxiety as a trait does not change statistically significantly in the studied group (P=0.368). The increase in anxiety as a trait upon admission to the Ward (examination I) may be linked to the acute phase of the disorder and the intensification of symptoms related to it. Undertaking the treatment reduces the intensification of anxiety as a trait which suggests the AN patients do not differ from their healthy friends in the way they perceive the situations which in prone individuals may lead to perceiving objectively safe situations as threatening ones and causing them to react with anxiety disproportionate to the situations. The following examinations (II, III, IV) did not show statistically significant differences in the intensification of anxiety between the AN patients and the reference group, which may suggest the presence of an anxiety component as specific, and somehow natural, among the so-called healthy adolescents.

CONCLUSIONS

Adolescence is believed to be one of the most important life crises in the natural cycle of human life [1]. A crisis is a situation which takes place the moment the already-tested adaptation and defence structures are no longer adequate and do not suffice in order to cope with new challenges coming either from the inside or from the outside world of an individual. The relaxation and at least partial disintegration take place at the level of thoughts and feelings. This is accompanied by anxiety, dilemmas, and frequently impulsive activities or compulsive behaviours. The results of our study confirm to some extent the picture of emotional difficulties in the group of healthy teenagers (reference group). Young people manifest both the anxiety traces, depressive behaviours or the obsessive-compulsive symptoms. In the event when an individual cannot enter into the crisis, or she or he enters into the crisis but cannot escape it, regression may occur, as well as renewed powerful fantasies, ways of thinking and feeling, psychopathological symptoms being the manner of coping with difficult developmental tasks connected with this age. Anorexia nervosa is a manifestation of a pathological way of solving a crisis connected with the adolescence process, and also it constitutes one of the most frequent adolescence disorders.

We should be careful while making double diagnoses, i.e. of AN and the obsessive-compulsive disorder, or AN and depression, or AN and the anxiety disorder – bearing in mind the diagnostic criteria.

Depressive, anxiety and obsessive-compulsive symptoms are not specific for all patients diagnosed with AN. The occurrence of similar problems: depressive, obsessive-compulsive, and anxiety ones, both in the AN group and in the reference group testifies the presence of psychic manifestations specific for adolescence rather than the co-existing symptoms characteristic for AN.

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