

## OLANZAPINE TREATMENT IN ANOREXIA NERVOSA: CASE REPORT

Elizabeta Dadić-Hero, Klementina Ružić, Mirjana Pernar, Milena Kabalin & Paola Medved

*Community Primary Health Centre, Primorsko-goranska county, Croatia*

### **SUMMARY**

*A 15 year old patient suffering from psychiatric disturbances looked for psychiatric help but refused hospital admission. Following an ambulatory treatment, the patient was diagnosed with Anorexia nervosa. The patient, a girl, was 175 centimeters tall, weighting only 39 kilos. Within the clinical picture, there were few dominant disorders present; anxiety, depression, low self-esteem, fear of feminization, with recurrent psychotic episodes. By the implementation of an intensive psychotherapeutic treatment, without the use of psychopharmacs, the weight was kept stable.*

*In accordance with the girl's mother, a psychopharmacotherapy was commenced, a combination of olanzapine and paroxetine (the choice of psychopharmacs was lead by the side effects known).*

*At the end of a 24-month period of a psychological treatment which was combined with psychopharmacotherapy, the patient exhibited no symptomatology and a stable clinical remission of the illness was achieved.*

**Key words:** *anorexia nervosa – olanzapine - weight gain*

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### **INTRODUCTION**

Anorexia nervosa can often appear during the period of adolescence, predominantly as a female disorder (Spettigue et al. 2008). Anorexia nervosa is an eating disorder activated by an overwhelming fear of gaining weight. The person affected by this disorder is often obsessed by her or his body image and usually perceives herself or himself as being overweight, when the reality is usually just the opposite. Since the person suffering from anorexia does not have a realistic understanding of her or his condition - which is undoubtedly ill and their own body perception is skewed, this disorder is extremely difficult to treat. The psychopathology of the illness is therapeutically very demanding (Mehler et al. 2001) and it is characterized by a high rate of mortality (Bissada et al. 2008, Papadopulos et al. 2009) and the high cost of treatment (Bissada et al. 2008).

The following case report demonstrates the acknowledged side-effect of the olanzapine drug. The aim of this study was to increase the anorexia nervosa patient's body weight.

### **CASE REPORT**

A 15 year old patient seeks psychiatric help due to her mental disturbances but refuses hospital admission (pediatric or psychiatric inpatient treatment) which she was advised. The girl's mother, under her daughter's influence, also refuses the idea of hospitalisation.

The patient lives in a family of four. The father is authoritative, prone to alcohol abuse; the mother is protective. The patient is a secondary school pupil and her school performance is within a B grade range.

The ambulatory treatment resulted with a diagnosis of Anorexia nervosa based upon the DSM –IV criteria. The patient was 175cm tall and weighted 39 kilos. The predominant symptoms within the clinical picture were: loss of menstrual period, fear of weight gain, a skewed body image and self-perception, anxiety, depression, fear of feminization and recurrent psychotic episodes. The beginning of the ambulatory treatment revealed patient's indifference towards the treatment but still, regular attendance in individual and family

psychotherapy was kept during a 6 month period. The patient's father gave up his family psychotherapy sessions. At the time, the symptomatology was still present but the weight was kept stable.

In accordance with the patient and her mother, psychopharmacotherapy was commenced – a combination of olanzapine and paroxetine (the choice of psychopharmacs was guided by all the side effects known of the medicaments mentioned and their therapeutic indications)(Brambilla et al. 2007, Dunican et al. 2007, Wang et al. 2006). A therapy of a 2.5 mg olanzapine dose in the evening and a 20 mg paroxetine dose in the morning was prescribed during a three week period until a stable 5 mg olanzapine dose in the evening (Dennis et al. 2006) and a 40 mg paroxetine dose in the morning was applied. This medicament therapy was kept within the above doses for a period of 24 months. During the first three months, a weight gain of an average of 3 kilos per month was observed which caused instant disappointment of the patient but didn't make her discontinue with the therapy prescribed. The following months registered some weight gain but of a slower intensity. The medicament therapy was combined with an individual psychotherapy, parallelly with an

adolescent group therapy during an 18 month period.

During a 24 month treatment period, three psychological testings were conducted, aiming at symptomology monitoring and evaluation of any improvements in the psychological condition.

## PSYCHODIAGNOSTICS AND EVALUATION

The first psychological testing enabled an insight within the patient's intellectual functioning, which was well above the average according to the chronological age. The semi-projective level of research referred at patient's fear of weight gain and loss of control. A fantasy picture of her father abusing alcohol, resulting with her fear of loss of control, was evident. Paradoxally, behind her fear of gaining weight was a feeling of guilt invoked by her dieting, which she saw as her biggest mistake. Her body perception was skewed, a feeling of seeing herself as being ugly was present. The separation fear was intense. She was afraid of the dark and of the heights. Self-esteem was low. Her body language was masculine.

**Table 1.** The Self-defence mechanism dimension of the „ŽS“ profile

SELF-DEFENCE MECHANISMS	1. MEASUREMENT (2005.)	2. MEASUREMENT (2006.)	3. MEASUREMENT (2008.)
Reactive fromation	80%	80%	50%
Negation	55%	45%	82%
Regression	53%	53%	42%
Repression	10%	20%	20%
Compensation	40%	50%	30%
Projection	92%	83%	50%
Intellectualisation	50%	67%	83%
Transposition	40%	50%	30%
General defensive activity	53%	55%	58%

As being evident from the table 1 above, in the beginning of the treatment, the patient's most emphasized defence mechanism was projection, with oppositionality in her attitude. Projection is used as defence from self-criticism. High projectivity points toward a paranoid disposition in personality, therefore, intimation is restrained.

She is abhorred by herself and by her body, and this is projected outwards, towards others. This repulsiveness is linked with her low or no self-esteem. These signs of repulsiveness can be seen through the mechanisms of reactive formation, which is the second most emphasized mechanism in her personality functioning. This mechanism is

used to defend herself from the feelings of pleasantness, joy and sexual pleasure. It is also evident that repression was of a rather low

intensity at the beginning of the treatment which points towards a weak capacity of her personality to regulate the feeling of fear.

**Table 2.** Rectified results of the MMPI-II scales of the personality test in three measurements

MMPI-II Scale	1. MEASUREMENT (2005.)	2. MEASUREMENT (2006.)	3. MEASUREMENT (2008.)
L –lying scale	3	4	7
F- rare figure	9	7	2
K-correction	6	9	7
Hs-hypochondriasis	15	14	8
D-depression	31	25	9
Hy-hysteria	18	15	7
Pd-psychoptic deviation	16	19	9
Pa-paranoia	12	10	4
Pt-psychasthenia	26	32	16
Sc-schizophrenia	22	21	12
Ma-hypomania	11	16	11

The above table 2 of the rectified results indicates a MMPI profile of a pathology in the personality tendency, within the frame of the depressive-paranoid axis of functioning.

The second testing after a year of treatment revealed some discreet improvements in the use of self-defensive mechanisms, with projection being somewhat lower and an increase of the use of the mechanism of intellectualisation. This implied that the patient managed to achieve some feeling of self-control. There is also an increase of the capacity to think and discuss about emotions, which is also a dimension where a direct psychotherapeutic effect of the treatment was mostly evident. The transition of aggression became more functionally used – the level of self-aggression is lowered. The regulation of fear is, to some extent improved.

The MMPI-II profile revealed some changes from the initial depressive-paranoid characteristics towards a depressive-anxious ones. A personality capacity to oppose authority began to rise. The level of optimism and life expansion also began to increase.

The third testing conducted near to the end of the 3-year treatment recorded the most evident changes within the domination of the defence mechanisms. The most intensively used is the

mechanism of intellectualisation, so the capacity for sublimation is achieved. Projectivity is noticeably lowered. The MMPI-II profile did not reveal any clinical intensities of any of the measured dimensions.

## DISCUSSION

At the end of a 24-month treatment (individual and group psychotherapy combined with psychopharmacotherapy), the patient ceased exhibiting any symptomatology and a stable clinical remission was achieved. The therapy dosage was accustomed to the experience from research evidenced in the literature so far (Spettigue et al. 2008, Branbilla et al. 2007, Duncan et al. 2007, Dennis et al. 2006, Bruce et al 2006). In the meantime, the patient successfully accomplished her education and kept regularly attending her check-ups every three months. She also found employment, started living together with her partner in a smaller urban area, so the social functioning can be defined as satisfactory. Her body weight was stable (66 kilos) for the whole period of time.

This case study presented the application of the known effects and side-effects of the medicaments used in Anorexia treatment since

psychotherapy treatment on its own did not show successful results. The results achieved show implications and guidelines in future treatment of other anorexic patients.

## CONCLUSION

Olanzapine is known to cause weight gain in some clinical cases – this has been established as its' side-effect. This fact was implemented through the anorexia nervosa patient's treatment and a realistic weight gain was achieved up to the normal values. The body weight has been kept stable for a longer period of time and there are no anorexia symptoms present, for the time being.

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### Correspondence:

Elizabeta Dadić-Hero  
Community Primary Health Centre, Primorsko-goranska county  
Cambierieva 2/II, 51000 Rijeka, Croatia  
E-mail: elizabeta.dadic.hero@ri.t-com.hr