

The prevalence of the psychiatric disorders in the Endocrinological Clinic of Arad

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Rezumat

Simptomele psihiatrice sunt frecvent intalnite la pacientii cu boli endocrinologice si pot reprezenta adevarate chei in diagnosticul tulburarilor psihiatrice.

Obiectiv: Scopul acestui studiu este de a determina prevalenta tulburarilor psihiatrice la pacientii cu boli endocrinologice si metabolice.

Material si metoda: Studiul s-a desfasurat pe un lot de 30 de pacienti internati in Sectia Clinica de Endocrinologie din Arad, in perioada decembrie 2007 – ianuarie 2008. Simptomele psihiatrice au fost evaluate cu scala MADRS (Montgomery Asberg Depression Rating Scale) si HAMA (Hamilton Rating Scale for Anxiety). Diagnosticul de tulburare psihiatrice a fost stabilit pe baza criteriilor de diagnostic din ICD-10 (International Classification of Diseases) si DSM-IV-TR (Diagnostic and Statistical Manual of Mental Disorders).

Rezultate: Insomnia, anxietatea si dispozitia depresiva au fost cele mai frecvente simptome psihiatrice intalnite. Insomnia a fost prezenta la 80% (n=24) din pacienti iar dispozitia depresiva a fost intalnita la 2/3 (n=19) din subiectii luati in studiu. Anxietatea a fost cel mai frecvent intalnit simptom; doar 2 pacienti nu au prezentat anxietate.

Media scorurilor scalei MADRS a fost de 16,17 puncte iar media scorurilor scalei HAMA a fost de 14,05 puncte, ceea ce inseamna ca simptomele psihiatrice au fost prezente intr-o pondere ridicata. 5 pacienti (16,6%) au fost diagnosticati cu tulburari psihiatrice (tulburare depresiva majora, tulburare depresiva datorata unie conditii medicale generale, tulburare mixta anxios depresiva, tulburare de anxietate generalizata), scorurile MADRS si HAMA fiind cele mai mari la acesti pacienti.

Concluzii: Toti pacientii au prezentat cel putin un simptom psihiatric. Cele mai frecvent simptome psihiatrice au fost anxietatea, insomnia si tulburarea depresiva. Conform criteriilor de diagnostic din ICD-10 si DSM-IV-TR, 5 pacienti (16,6%) au fost diagnosticati cu tulburari psihiatrice.

Cuvinte cheie: boli endocrinologice, tulburari psihiatrice

Abstract

Background:

Psychiatric symptoms are often present in patients with endocrine diseases and could provide clues for the psychiatric disorders.

Objective:

The aim of this study is to identify the prevalence of the psychiatric disorders in patients with endocrine and metabolic diseases.

Material and Methods:

The study was conducted on the Endocrinological Clinic of Arad, during dec 2007 – jan 2008 and comprises 30 patients admitted in the hospital for endocrine disorders. The psychiatric symptoms were evaluated with MADRS (Montgomery Asberg Depression Rating Scale) and HAMA (Hamilton for Anxiety Rating Scale). The diagnosis of psychiatric disorders was established according to ICD-10 (International Classification of Diseases) and DSM-IV-TR (Diagnostic and Statistical Manual of Mental Disorders).

Results:

Insomnia, anxiety and depressed mood were the most frequent psychiatric symptoms. Insomnia was present to 80% (n=24) of the patients and depressed mood was present to 2/3 of the patients (n=19). Anxiety was the most frequent symptom; only 2 patients didn't presented anxiety.

The average of the MADRS scores was 16,17 and the average of HAMA scores was 14,05, which means that the psychiatric symptoms were present in a high percentage. 5 patients (16,6%) were diagnosed with psychiatric disorder (major depressive disorder, mood disorder due to a general medical condition, mixed anxiety-depressive disorder, generalized anxiety disorder). MADRS or HAMA scores were the highest to these patients.

Conclusions:

All patients presented at least one psychiatric symptom. The most frequent symptoms were anxiety, insomnia and depressed mood. According to ICD-10 and DSM-IV-TR, 5 patients (16,6%) were diagnosed with psychiatric disorders.

Keywords: endocrine disease, psychiatric disorder

Endocrine disorders may produce symptoms that are indistinguishable from psychiatric illnesses. The effect of the endocrinopathies on psychiatric symptomatology has been studied especially for the disorders of the thyroid and adrenal glands and less for the other endocrine disorders. Study of the

relationship between endocrine diseases and psychiatric disorders is important because of possible common biological etiology. Certain endocrine conditions may improve with psychiatric treatment: insulin resistance has been reported to decrease after successful treatment with antidepressants. Similarly, depressive symptoms improve under treatment with antiglucocorticoids and thyroid replacement.

Psychiatric features of hyperthyroidism include nervousness, fatigue, insomnia, mood lability and dysphoria. Speech may be pressured. In severe cases, there may be visual hallucinations, paranoid ideation and delirium. The differential diagnosis between hyperthyroidism and panic disorder, generalized anxiety disorder, social and simple phobias is based on the presence of symptoms that resemble hyperthyroidism such as tachycardia, diaphoresis and tremulousness. In some cases, hyperthyroidism may produce severe agitation resembling a manic state.

Psychiatric symptoms of hypothyroidism include depressed mood, apathy, impaired memory and concentration and longer response latency. Hypothyroidism may contribute to treatment-refractory depression. A psychotic syndrome of auditory hallucinations and paranoia, named myxedema madness, has been described in some patients.

Among patients with bipolar disorder and schizophrenia, the prevalence of type II diabetes has been reported to be two or three times that of the general population. Use of psychotropic medication can lead to type II diabetes by stimulating food intake and carbohydrate use. The weight gain can result from decreased energy expenditure as a result of psychotropic medication use (through sedation).

Depression may be slightly more common in persons with diabetes than in non diabetic persons. Depression has been demonstrated to be a major factor in causing hospital admission and death in persons with diabetes mellitus. Insulin resistance during depressive illness might contribute to the linkage between depression and type II diabetes. (Sadock et al, 2005)

In conclusion, psychiatric symptoms are often present in patients with endocrine diseases and could provide clues for the psychiatric disorders. Very often, psychiatric disorder in patients suffering by an endocrine disease is hardly recognized, so it will be not treated, influencing the prognosis of the somatic disease and of the psychiatric disease also.

Objective: The aim of this study is to identify the prevalence of the psychiatric disorders in patients with endocrine and metabolic diseases.

Material and Methods: The study was conducted on the Endocrinological Clinic of Arad, during December 2007 – January 2008 and comprises 30 patients admitted in the hospital for endocrinological disorders. The psychiatric symptoms were evaluated with MADRS (Montgomery Asberg Depression Rating Scale) and HAMA (Hamilton for Anxiety Rating Scale). The diagnosis of psychiatric disorders was established according to ICD-10 (International Classification of Diseases) and DSM-IV-TR (Diagnostic and Statistical Manual of Mental Disorders).

In typical depressive episodes, according to ICD-10 diagnostic criteria, the individuals usually suffers from depressed mood, loss of interest and enjoyment and reduced energy leading to increased fatigability and diminished activity. Marked tiredness after only slight

effort is common. Other common symptoms are:

- (a) reduced concentration and attention;
- (b) reduced self-esteem and self-confidence;
- (c) ideas of guilt and unworthiness (even in a mild type of episode);
- (d) bleak and pessimistic views of the future;
- (e) ideas or acts of self-harm or suicide;
- (f) disturbed sleep;
- (g) diminished appetite.

The lowered mood varies little from day to day, and is often unresponsive to circumstances, yet may show a characteristic diurnal variation as the day goes on. In some cases, anxiety, distress and motor agitation may be more prominent at times than the depression and the mood change may also be masked by added features such as irritability, excessive consumption of alcohol, histrionic behavior and exacerbation of pre-existing phobic or obsessional symptoms or by hypochondriacally preoccupations. For depressive episodes of all three grades of severity (mild, moderate and severe), a duration of at least 2 weeks is usually required for diagnosis, but shorter periods may be reasonable if symptoms are unusually severe and of rapid onset. (ICD-10)

According to DSM-IV-RT, the diagnostic criteria for major depressive disorder are:

A. Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure. Note: Do not include symptoms that are clearly due to a general medical condition, or mood-incongruent delusions or hallucinations.

(1) depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad or empty) or observation made by others (e.g., appears tearful).

(2) markedly diminished interest or pleasure in all, or almost all activities, most of the day, nearly every day (as indicated by either subjective account or observation made by others).

(3) significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day.

(4) insomnia or hypersomnia nearly every day.

(5) psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)

(6) fatigue or loss of energy nearly every day

(7) feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).

(8) diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)

(9) recurrent thoughts of death (not just fear of dying) recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

B. The symptoms do not meet the criteria for Mixed Episode.

C. The symptoms cause clinically significant distress or impairment in social,

occupational or other important areas of functioning.

D. The symptoms are not due to the direct psychological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hypothyroidism).

E. The symptoms are not better accounted for by Bereavement, i.e., after the loss of a loved one, the symptoms persist for longer than 2 months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms or psychomotor retardation. (DSM-IV-TM)

The essential feature for Generalized Anxiety Disorder, according to ICD-10 diagnostic criteria, is anxiety, present more days for at least several weeks at a time, and usually for several months. These symptoms should usually involve elements of:

- a) apprehension (worries about future misfortunes, feeling “on edge”, difficulty in concentrating, etc.);
- b) motor tension (restless fidgeting, tension headaches, trembling, inability to relax); and
- j) autonomic overactivity (lightheadedness, sweating, tachycardia or tachypnoea, epigastric discomfort, dizziness, dry mouth, etc). (ICD-10)

According to DSM-IV-RT, the criteria for Generalized Anxiety Disorder are:

A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance)

B. The person finds it difficult to control the worry.

C. The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms present for more days than not for the past 6 months).

- (1) restlessness or feeling keyed up or on edge
- (2) being easily fatigued
- (3) difficulty concentrating or mind going blank
- (4) irritability
- (5) muscle tension
- (6) sleep disturbance (difficulty falling or staying asleep or restless unsatisfying sleep)

D. The focus of the anxiety and worry is not confined to features of an Axis I disorder, e.g., the anxiety or worry is not about having a Panic Attack (as in Panic Disorder), being embarrassed in public (as in Social Phobia), being contaminated (as in Obsessive-Compulsive Disorder), being away from home or close relatives (as in Separation Anxiety Disorder), gaining weight (as in Anorexia Nervosa), having multiple physical complaints (as in Somatization Disorder) or having a serious illness (as in Hypochondriasis) and the anxiety and worry do not occur exclusively during Posttraumatic Stress Disorder.

E. The anxiety, worry or physical symptoms cause clinically significant distress or impairment in social, occupational or other important areas of functioning.

F. The disturbances is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hyperthyroidism) and does not occur exclusively during a Mood Disorder, a Psychotic Disorder or a Pervasive Developmental Disorder. (DSM-IV-TM)

The most used scales for assessing depressive symptoms are MADRS (Montgomery and Asberg Depression

Rating Scale) and HAMD (Hamilton Rating Scale for Depression) and for anxious symptoms is HAMA (Hamilton Rating Scale for Anxiety). In this study we used one scale for assessing depressive symptoms (MADRS) and one scale for assessing anxious symptoms (HAMA).

Montgomery Asberg Depression Rating Scale (MADRS) was developed on 1979. It is constructed to be sensitive to treatment effects. It has 10 items measuring the core symptoms of clinical depression and these symptoms are rated from 0 to 6. The rating should be based on a clinical interview moving from broadly phrased questions about symptoms to more detailed ones which allow a precise rating of severity. The rater must decide whether the rating lies on the defined scale steps (0, 2, 4, 6) or between them (1, 3, 5). Moderate depression usually indicates a score of 20 or greater.

The items of MADRS

1. Apparent sadness
2. Reported sadness
3. Inner tension
4. Reduced sleep
5. Reduced appetite
6. Concentration difficulties
7. Lassitude
8. Inability to feel
9. Pessimistic thoughts
10. Suicidal thoughts

Hamilton for Anxiety Rating Scale (HAMA) was developed in the late 1950s to assess anxiety symptoms, both somatic and cognitive. There are 14 items, each of

which is rated from 0 to 4 (0 = none, 1 = mild, 2 = moderate, 3 = severe, 4 = very severe, grossly disabling), with the total score ranging from 0 to 56. A score of 14 has been suggested to be significant for clinical anxiety and scores of 5 or less are typical in individuals in the community. The scale is designed to be administered by a clinician and has been used extensively to monitor treatment response in studies of generalized anxiety disorder. (Sadock et al, 2005, Sadock et al., 2007)

The items of HAMA are:

6. Anxious mood
7. Tension
8. Fears
9. Insomnia
10. Intellectual
11. Depressed mood
12. Somatic (muscular)
13. Somatic (sensory)
14. Cardiovascular symptoms
15. Respiratory symptoms
16. Gastrointestinal symptoms
17. Genitourinary symptoms
18. Autonomic symptoms
19. Behaviour at interview

Results:

Insomnia, anxiety and depressed mood were the most frequent psychiatric symptoms. Insomnia was present to 80% (n=24) of the patients and depressed mood was present to 2/3 of the patients (n=19). Anxiety was the most frequent symptom; only 2 patients didn't presented anxiety.

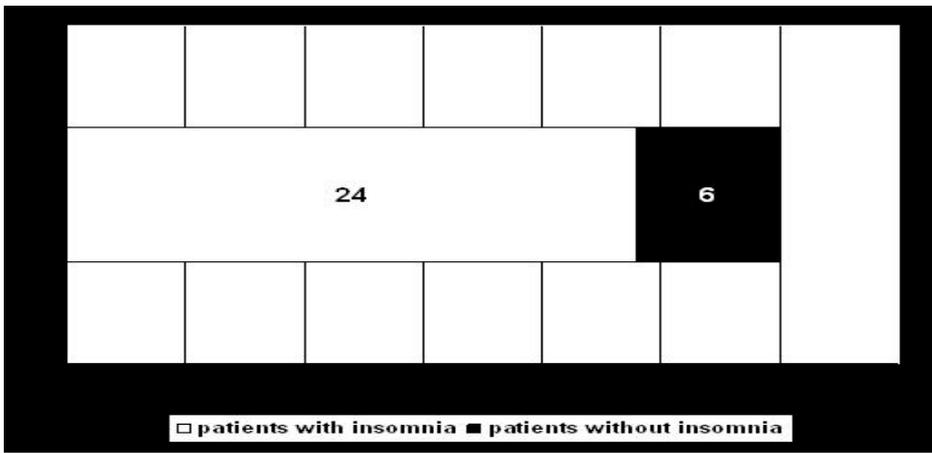


Fig. 1 The prevalence of insomnia

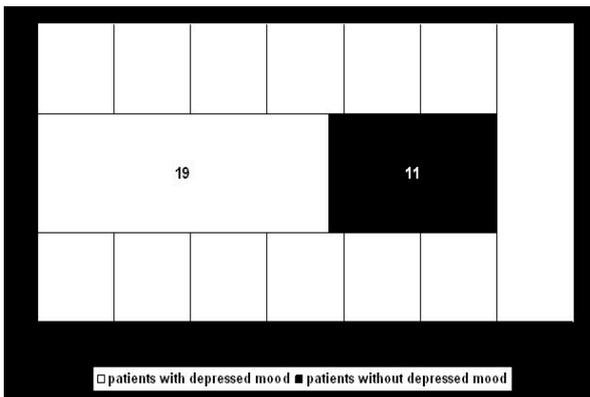


Fig. 2 The prevalence of depressed mood

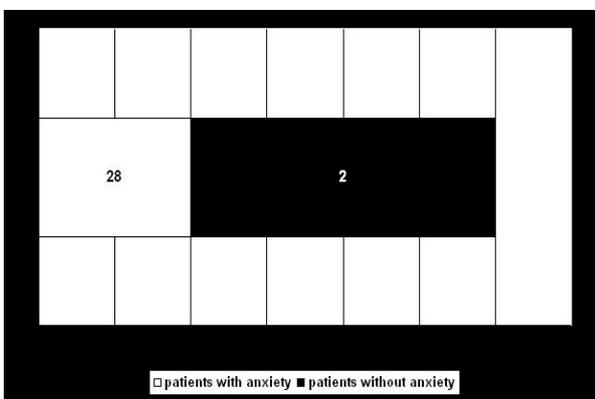


Fig. 3 The prevalence of anxiety

The average of the MADRS scores was 16,17 and the average of HAMA scores was 14,05, which means that the psychiatric symptoms were present in a high percentage. 5 patients (16,6%) were diagnosed with psychiatric disorder:

- major depressive disorder (MADRS: 37points, 26 points)
- mood disorder due to a general medical condition (MADRS: 24 points)
- mixed anxiety-depressive disorder (MADRS: 19points and HAMA: 21points)
- generalized anxiety disorder (HAMA: 32points)

MADRS or HAMA scores were the highest to these patients.

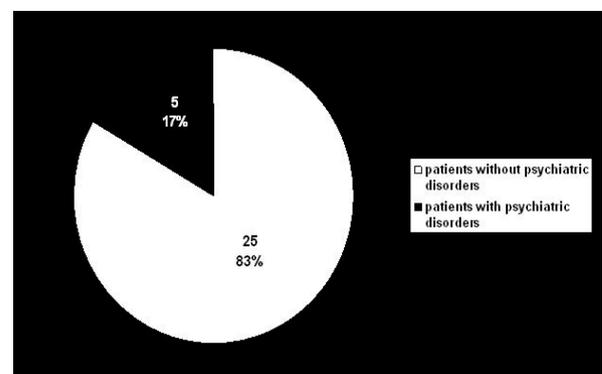


Fig. 4 The prevalence of psychiatric disorders

Conclusions:

All patients presented at least one psychiatric symptoms.

The most frequent symptoms were anxiety, insomnia and depressed mood.

According to ICD-10 and DSM-IV-TR, 5 patients (16,6%) were diagnosed with psychiatric disorder

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