

SOMATO-PSYCHIC DISORDER CLINICAL CASE IN A FEMALE PATIENT WITH MULTINODULAR EUTHYROID GOITER

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Abstract

The article presents a clinical case of somato-psychic disorder in a patient with multinodular euthyroid goiter. The patient was diagnosed with thyroid cancer on outpatient basis and was suggested urgent surgical treatment. After receiving information about cancer pathology the patient developed symptoms of hypernosognostic neurotic syndrome with manifestations of obsessions and hystero-hypochondriasis. The patient was focused on the rigid hypochondria with detailed statement of the slightest signs of bodily distress.

Therefore, the above example demonstrates difficulty in selecting the tactics of management for such patients due to development of symptoms primarily determined by psycho-emotional tension. This category of patients should be followed not only by endocrinologists, surgeons, but the multidisciplinary team, including psychiatrists, and psychotherapists, since in case of combined impact of a number of adverse factors, the reaction to the disease can become so extreme that its management in the early stages of therapy seems no less important than the direct treatment of somatic condition.

Keywords: Thyroid gland, multinodular euthyroid goiter, nosogeny, fine-needle aspiration biopsy, psycho-emotional tension.

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1. Introduction

Psychogenic disorders referred to as “nosogenies” due to the influence of psycho-traumatic events associated with somatic disorder [1, 2]. Structures of nosogenies are determined by psychological, social, constitutional and biological factors [3, 4]. Among psychological and social effects the primary role plays patient’s attitude towards his or her own illness, which in accordance with the concept of the internal picture of the disease can be reduced to two polar positions: hypernosognosia and hyponosognosia [5–7]. A certain role in formation of nosogenies play such factors as wording of the diagnosis, ability to influence the manifestation of the disease, the restrictions imposed by somatic condition on the household and professional activities [8, 9]. Among clinical manifestations affecting formation of nosogenic reactions, it is necessary to allocate special features of dynamics of the somatic disease with acute disorders of vital functions, which are accompanied by fear for life and panic attacks [10]. As well, an important role in formation of the disease picture play frequent exacerbations of the underlying disease, especially in those cases where particular exacerbation is associated with adverse external influences in the patient’s mind. In case of combined impact of a number of adverse factors, the reaction to the disease can become so extreme that its management in the early stages of therapy seems no less important than the direct treatment of somatic condition [11, 12].

2. Materials and methods

We present a clinical case of somato-psychic disorder in a female patient with multinodular euthyroid goiter. The patient K., 57 years old, was routinely admitted to the department of surgery of Kharkiv City Clinical General Hospital No. 17 for surgical treatment with the diagnosis of “Multinodular goiter, grade 2, euthyroid state”. Primary diagnosis was established two years ago (**Fig. 1**).

Upon admission to the hospital the patient complained of enlargement of the thyroid gland, tickling, sensation of a lump in the throat, choking in horizontal position, general weakness, shortness of breath worsening during walking, tremor, trembling, excessive sweating, hot flushes, chills, dizziness, fear for her life associated with the presence of oncological disease.



Fig. 1. The patient with the multinodular goiter, grade 2, euthyroid state

3. Anamnesis

The patient considers herself ill for 2 years, when the above-mentioned complaints appeared for the first time, however, their intensity was less expressed.

Over the past 6 months she noted deterioration of general health, specifically, significant enlargement of the thyroid gland causing discomfort, as well as cosmetic defect on the anterior surface of the neck, progressive shortness of breath, especially during physical activity, general weakness. She has had no in-patient treatment during mentioned above period, has not been followed up by endocrinologist. The patient decided to self-treat herself using folk remedies.

For the first time she sought medical assistance in the local clinic, where based on ultrasound examination she was diagnosed with thyroid cancer, and was suggested urgent surgical treatment. After receiving information about cancer pathology the patient developed symptoms of hypernosognostic neurotic syndrome with manifestations of obsessions and hystero-hypochondriasis. Fears and preoccupation about her illness and impossibility of complete social rehabilitation were combined with hyper-introspection, exaggerated assessment of health-threatening consequences of the disease, expressed demonstrative behavior, brightness and imagery of complaints involving conversion syndrome. The patient was focused on the rigid hypochondria with detailed statement of the slightest signs of bodily distress, establishment of partial-load life style “protecting” from possible complications or exacerbation of physical illness (diet, domination of rest over work, exception of any information perceived as “stressful”, strict regulation of the physical loads, taking medication, etc.). The patient was consulted by professor of the Department of General Surgery №1, of Kharkiv National Medical University, Shevchenko S. I., and insisted upon surgical treatment. The patient hospitalized for further careful examination and consideration of future management.

4. Life anamnesis

The patient denies tuberculosis, hepatitis A, diabetes mellitus, and sexually transmitted diseases in the past. Hereditary and allergic anamnesis is not burdened. She is a non-smoker, does not drink alcohol. In 2001 she underwent laparoscopic cholecystectomy, in 2003 – appendectomy.

5. Physical examination

General condition is satisfactory. The patient is alert and oriented. Status is active, posture is straight erect, steady at gait. Build is regular, appropriate to the age and sex. Constitution is normosthenic. Bodily injury, physical defects, and developmental abnormalities are absent. The

patient is of satisfactory nutrition: skinfold thickness at the costal arch is 1.5–2 cm, around the navel is 2–3 cm, Broca's index is 90–110 % (Quetelet index is 20–24). The skin is of normal color, clean, warm, smooth, of normal humidity, of medium thickness, of moderate density, elasticity (turgor) and integrity are intact. Subcutaneous adipose tissue is of homogeneous consistency, there are no edema, and pastosity. The hair growth is developed in accordance with age and gender. The skin of the scalp is clean. Hair and nails are not changed. The face, ears, nose and eyes are without pathological changes. The external auditory canals and nasal passages have no discharge. Hearing is normal. Nasal breathing is not obstructed. The mucous membrane of the conjunctiva, oral cavity and pharynx are pink, clean, and moist. Swallowing is normal. Voice is not changed, corresponds to gender. The neck is of usual shape with smooth contours. The thyroid gland is visually identified. On palpation it is of dense elastic consistency, nodular, partly located behind the breastbone. In the right lobe there is a nodal mass of up to 4 cm in diameter, of dense consistency, mobile, painless, in the left lobe there is a node of up to 5 cm in diameter, of dense consistency, mobile, painless, no adhesion to the skin and surrounding tissue. Peripheral lymph nodes are not enlarged.

Mammary glands are without pathology. Muscular system is of satisfactorily development, muscles are painless with sufficient tone and strength. The integrity of the bones is intact, their surface is smooth, there is no tenderness at palpation and percussion. The joints are visually unchanged. The spine is properly configured.

Joints and spine movements are in full range.

The cardiovascular system. Heart push, protrusion in precordial area, retrosternal and epigastric pulsation are not visually defined. Swelling of the neck (jugular) veins, the expansion of the saphenous veins of the trunk and limbs, as well as the visible pulsation of the carotid and peripheral arteries are absent. On palpation of the radial arteries the pulse is of satisfactory strength, equal on both arms, simultaneous, rhythmic, with the rate of 80 per minute, of normal tension, the vascular wall out of the pulse wave is not palpable. Cardiac impulse, phenomena of systolic and diastolic thrill in the precordium, retrosternal and epigastric pulsation are not detected by palpation. Pulsation of temporal artery and distal lower limb arteries is maintained, and equal on both sides. Auscultation of the heart rate corresponds to the pulse.

The tones of the heart are clear (no split, no extra tones), clean (no noise) at all points of auscultation. The ratio of tone volume is not changed: at the heart apex and at the base of the xiphoid process the tone I is louder than the tone II, above the aorta and pulmonary artery the tone II is louder than the tone I. In the peripheral arteries and jugular veins bulbs the noises are not detected. Blood pressure is 140/90 mm Hg. The difference on the right and the left brachial arteries is not higher than 10 mm Hg.

Respiratory system.

On examination, the thorax is of normal shape, symmetrical.

Over- and subclavian fossa are moderately expressed, equal on both sides. The contour of the ribs is normal, intercostal spaces are not expanded. Respiratory rate is 16 bpm, breathing motion is rhythmic, of average depth, both sides of the chest are equally involved in the act of breathing. Thoracic type of breathing prevails. The ratio between the inhalation and exhalation phases is normal. Breathing is silent, without involving auxiliary muscles. The thorax at compression is elastic and supple. On palpation the integrity of the ribs is intact, their surface is smooth. Ribs, intercostal spaces, and pectoral muscles are painless. Voice tremor is expressed moderately, equal on the symmetric parts of the chest. At comparative percussion above the entire surface of the lungs, a clear lung sound is detected. At lungs auscultation on both sides, vesicular breathing is detected. Side breathing noises (wheezing, crackling noise, friction of pleura) are not identified. Bronchophony is negative on both sides.

Abdominal organs.

Upon examination, the abdomen is of normal size, the correct shape, symmetrical, equally involved in the act of breathing. Visible peristalsis, hernial protrusions and expansion of the saphenous veins of the abdomen are not detected. At superficial palpation the abdomen is soft, painless, abdominal muscles are well developed, the divergence of direct muscles is absent, the umbilical ring is not extended. No abnormal formations is palpable in the abdominal cavity. At percussion

and fluctuation no signs of free fluid accumulation in the abdominal cavity detected. Auscultation of the abdomen reveals noise of intestinal motility in the form of intermittent rumbling and fluid transfusion. Peritoneum friction noise, and systolic murmur above the aorta and mesenteric arteries are absent. Genitourinary system. Upon examination the lumbar area is not changed. Kidneys are not palpable both in supine and standing position.

Laboratory assessment report: Complete blood count, urinalysis, serum biochemistry, coagulation were within normal range. Thyroid hormone levels: TSH was 2.4 mIU/L, total T4 was 102 nmol/L, total T3 2.2 nmol/L, free T4 was 16 pmol/L, free T3 was 8,4 pmol/L, TPOAb was 70 mU/l.

Instrumental diagnostic methods results.

ECG: sinus rhythm, normal horizontal position of the heart, heart rate = 88 bpm.

Ultrasound examination of the thyroid gland with FNAB (Fine-needle aspiration biopsy): The right lobe = 16 ml, the left lobe = 39 ml. It is located in the typical place with chest area extension. Enlarged in size. Total echogenicity is normal.

In the structure of the gland the similar type of isoechogenous masses of heterogeneous cystic-solid structure with clear boundaries is visualized: 14×10×12 mm in the middle segment of the right lobe, 35×26×37 mm in the lower segment of the right lobe, and 43×32×35 mm in the lower segment of the left lobe.

The rest of the gland parenchyma is homogeneous, medium-grained.

Peripheral lymph nodes are not visualized.

Conclusion: multinodular goiter, grade 2 (**Fig. 2**).



Fig. 2. Ultrasound examination of the thyroid gland

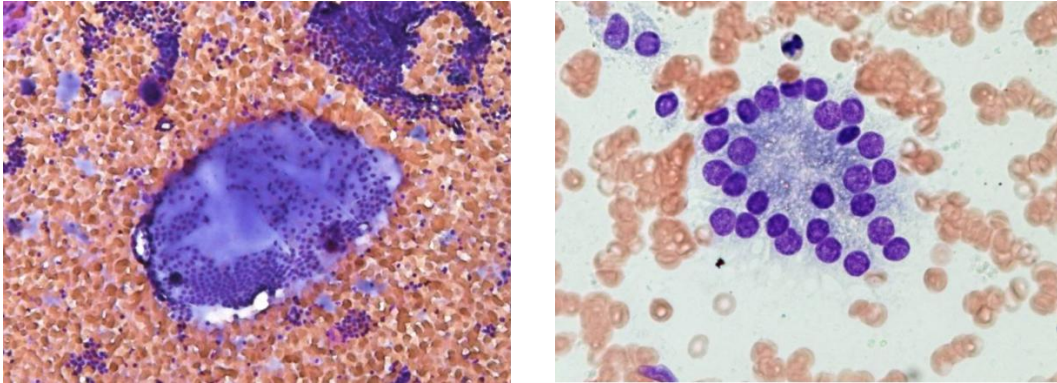
FNAB of the thyroid gland under ultrasound control No. 0402/825 was performed. For diagnostic purposes 2 punctures of thyroid gland formations were performed: 14×10×12 mm, 35×26×37 mm in the right lobe and 43×32×35 mm in the left lobe.

Cytological examination of preparations of FNAB of thyroid gland formations No. 0402/825. Preparations No. 0402/825-1, 2, puncture samples are 14×10×12 mm. Preparations No. 0402/825-3, 4, puncture samples are 35×26×37 mm. Preparations No. 0402/825-5, 6, puncture samples are 43×32×35 mm. Microscopic investigation: in the midst of the peripheral blood cells and basophilic colloid there are unchanged A-cells in the form of singular layers, and B-cells. Atypical cells were not found.

Cytologic conclusion: Cytoqram of received puncture samples corresponds with the diagnosis of nodular goiter (**Fig. 3 a, b**).

Therefore, based on the above, specifically, the data of physical examination, the laboratory results, instrumental and cytological investigations thyroid carcinoma was ruled out in this patient. However, this did not affect the attitude of the patient to his disease, and the patient undeniably insisted on performing the surgery.

Surgical procedure was performed to the extent of subtotal resection of the thyroid gland (**Fig. 4**).



a *b*
Fig. 3. (*a, b*) The cytogram corresponds to the diagnosis of nodular goiter



Fig. 4. Gross specimen of the resected thyroid gland

Histological conclusion: the nodular micro-macrofollicular colloid goiter with secondary changes, microfocal chronic lymphomatoid thyroiditis. The postoperative period was uneventful, with no complications (**Fig. 5**).

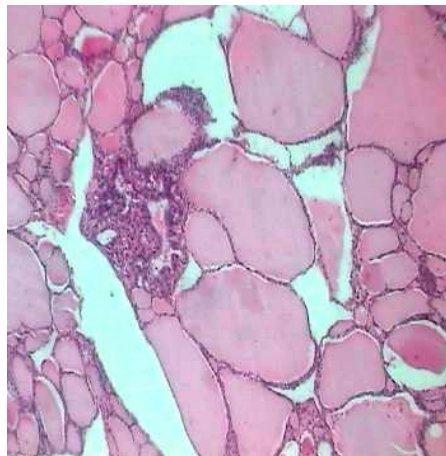


Fig. 5. Histogram. The nodular micro-macrofollicular colloid goiter with secondary changes, microfocal chronic lymphomatoid thyroiditis. The postoperative period was uneventful, with no complications

Postoperative wound healed by primary intention. During her stay in the hospital the patient did not present any psycho-emotional complaints. The patient was discharged from the hospital at the 6th day in satisfactory condition.

6. Results

2 weeks after receipt of the histological conclusion the patient began to hold demands against medical staff about the unreasonable surgery, which caused, in her words, her disability, inability to perform daily activity at home and at work.

The patient again began complaining to tickle, feeling of a lump in her throat, choking in horizontal position, general weakness, shortness of breath, worsening during walking, tremor, trembling, excessive sweating, hot flushes, chills, dizziness. The patient undeniably refused to re-consultation.

7. Conclusions

Therefore, analyzing the clinical case, we have concluded the following. The above example demonstrates the difficulty in selecting the tactics of management for such patients due to development of symptoms primarily determined by psycho-emotional tension. This category of patients should be followed not only by endocrinologists, surgeons, but the multidisciplinary team, including psychiatrists, and psychotherapists.

References

- [1] Alexander, F. (2002). Psychosomatic Medicine. The principles and practical application. Moscow: Eksmo-Press, 352.
- [2] Berezantsev, A. Y. (2001). Psychosomatics and somatoform disorders. Moscow, 191.
- [3] Bazhin, E. F., Gnezdilov, A. V. (1983). Psychogenic reactions in cancer patients. Leningrad: Guidelines, 33.
- [4] Broytigam, V., Christian, P., Rad, M. (1999). Psychosomatic Medicine. Moscow: Geotar Medicine, 376.
- [5] Bukhtoyarov, O. V., Arkhangelskiy, A. E. (2008). Psychogenic cofactor of carcinogenesis. Possible applications of hypnotherapy. SPb., Aleteya, 264.
- [6] Zelenina, E. V. (1997). On typology of somato-vegetative depressive symptom. Moscwo: Depression and comorbid disorders, 72–78.
- [7] Kukushkin, M. L. (2004). Psychogenic pain syndromes. Pain, 1 (2), 2–6.
- [8] Luban-Plotstsa, B., Poeldinger, V., Kroeger, F., Lederakh-Hoffman, K. (2000). Psychosomatic disorders in general medical practice. St. Petersburg, 287
- [9] Kabanova, M. M. (1990). Psychological diagnostics of attitude to disease in neuro-psychiatric and somatic diseases. Leningrad: Len. RDPI n.a. V. M. Bekhterev, 172.
- [10] Samushia, M. A., Mustafina, E. A. (2007). Nozogenies (psychogenic reactions) in females with malignancies of the reproductive system. Mental disorders in general medicine, 3, 11–16.
- [11] Semke, V. J. (2008). Psychiatry and Oncology. Planes of contact. Siberian Journal of Psychiatry and Narcology, 3, 7–12.
- [12] Smulevich, A. B., Andryushchenko, A. V., Beskova, D. A. (2009). Mental disorders in oncology (the results of a multinational program “Synthesis”). Mental disorders in general medicine, 1, 4–11.