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RESEARCH ARTICLE

HYPOTHYROIDISM AND PSYCHOTIC MANIFESTATIONS: CASE REPORT

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Abstract

Thyroid hormones are important for the development, maturation, and function of the central nervous system. While the association between the lack of thyroid hormones in congenital hypothyroidism and profound mental retardation is well documented (Dugbartey 1998), hypothyroidism acquired in adulthood can also manifest itself in a variety of symptoms not only somatic, but also psychiatric especially mood disorders, and anxiety. Psychotic symptoms are rare but are part of this psychic picture. We report the case of a 50-year-old female patient admitted to the psychiatric emergency department for psychomotor agitation of a psychotic appearance, revealing autoimmune hypothyroidism. This observation underlines the need not to underestimate the responsibility of the thyroid hormonal balance in the onset of psychotic manifestations, and to eliminate dysthyroidism before any psychotropic treatment.

Introduction:-

Hypothyroidism is the most common thyroid dysfunction, especially for women. It is defined by insufficient secretion of thyroid hormones, responsible for a hypometabolismstate. Its prevalence is estimated between 4 and 8%, with a clear female preponderance (sex ratio: 1/10). It is mainly of autoimmune and iatrogenic origin, especially secondary to surgical thyroidectomies. This pathology is involved in various psychiatric disorders, especially mood disorders. However, Psychotic disorders in hypothyroidism have been known for many years [1], but rarely described. They sometimes appear in the foreground and then make the diagnosis difficult [2]. The objective of this work is to discuss, through a clinical case, psychotic disorders related to hypothyroidism, as well as their management.

Clinical case

50-year-old female patient married and mother of 03 children, housewife, from a rural environment. Without a psychiatric, medical-surgical, or toxic history.Admitted to the psychiatric emergency for a psychomotor agitationstate. She is accompanied by her husband who reports a break from the previous state, a withdrawal into oneself, with the recent appearance of delusional idias. On admission, the psychiatric interview finds a sthenic woman with a quirk of contact, without sign of mental confusion. She verbalizes delusional comments, with interpretive and intuitive mechanisms, with a polymorphic theme, adherence is total, with strong emotional participation. Thymia is neutral. And There was no evidence for a hallucinatory mechanism. Laboratory tests found an elevated TSH (thyroid-stimulating hormone) level with lowered thyroid hormone levels FT3 and FT4.

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Faced with this picture of hypothyroidism, the patient was transferred to the endocrinology department where thyroid hormone supplementation with levothyroxine was initiated at a dosage of 50 µg / d for five days then increased to 75 µg / d. Antipsychotic treatment with amisulpride started at 200 mg/day and gradually increased to 400 mg/day, associated with an anxiolytic treatment based on bromazepam 6 mg/day. thyroid ultrasound revealed the presence of goiter with highanti-TPO antibody level, allowing the diagnosis of autoimmune thyroiditis. The evolution was marked by attenuation of delusional symptoms over a period of 15 days. The outpatient follow-up was characterized by stabilization of her condition and a complete return to the premorbid state with normalization of her thyroid hormones levels.

Discussion:-

Originally described in the literature as appearing well after physical signs [3], it is now shown that the psychiatric symptomatology of hypothyroidism does not vary with its depth [4]. Hypothyroidism can be expressed by a depressive picture associating psychomotor slowing down, decreased intellectual performance, fatigability, loss of appetite, and apathy. The "myxedematous madness", described for the first time in 1949 [1], creates a picture of a confusing and hallucinatory psychotic state, or melancholic statefrequently stuporous, more rarely of hypomania [5].

A cross-sectional study of 45 patients followed for peripheral hypothyroidism found a psychotic disorder in only 2.8% of cases [6]. When psychotic disorders are in the foreground, we have not found any study comparing their frequency according to whether they are related to hypo- or hyperthyroidism. The number of reported cases describing dysthyroidism revealed by psychosis is very low and does not allow a preferred association to be determined. Although established [7], the link between these disorders and dysthyroidism is still poorly understood. Several studies suggest the synergistic action of biogenic amines and thyroid hormones involved in numerous metabolic processes which are thought to have an important role in determining psychiatric status [8].

Hormone replacement therapy usually helps regression of physical signs and improvement of psychiatric signs, especially if started early. the presence of delusional symptoms justifies the introduction of psychotropic treatment in combination with thyroid hormone supplementation. It has been shown that this association allows a more rapid regression of psychotic disorders [9]. Atypical antipsychotics will preferably be chosen, because of their better tolerance and their lower risk of tardive dyskinesias which they cause in the long term. Olanzapine appears to be the treatment of choice due to its lower cardiological risk [9–10] but is prone to significant weight gain. Aripiprazole may also be preferred for the same reason [11,12], but no study has addressed the subject of their associations with levothyroxine for the treatment of psychotic disorders associated with hypothyroidism. The gradual reduction in the doses of antipsychotic treatments may be considered once the thyroid hormones levels have stabilized and the psychiatric symptoms have been controlled. These symptoms often persist longer than somatic disorders [9]. Also, it is estimated in the literature that 10% of patients present residual neuropsychiatric symptoms [13], thus justifying long-term antipsychotic prescription.

Conclusion:-

This clinical case reminds us of the complexity of interactions between hormones and neurotransmitters, thus, psychiatric symptomatology may be the manifestation of endocrine pathology, and hypothyroidism complicated by psychosis is just one example. This should be taken into consideration in our clinical practice, by performing a thyroid workup in the event of poor response to psychotropic therapy, in order to exclude possible subclinical hypothyroidism, and by closely monitoring the emotional and psychologicalstates of patients with dysthyroidism.

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