# A CROSS SECTIONAL STUDY TO EVALUATE THE ASSOCIATION BETWEEN MELANCHOLIC TEMPERAMENT AND HYPOTHYROIDISM IN FEMALES OF REPRODUCTIVE AGE GROUP

## **INTRODUCTION:**

Temperament is a basic attribute of our mental life, excitableness. Disposition, which determines formal qualities of our reactions, such as their strength, duration etc. Temperament is linked with features of function of central nervous system and construction of the body <sup>[1]</sup>. The temperament is "What becomes". It is the "dynamic". It is the ensemble of the possibilities in the physical, psychological, biological and dynamic spheres of the individual <sup>[2]</sup>. Temperament, though an elusive concept, is a useful one, and may be directed to a profitable meaning. As chemistry was assured of the existence of elements before their determination was at all complete, so does psychology may emphasize the temperamental basis <sup>[3]</sup>.

The Greek physician Hippocrates [460 - 370 BC] described the four temperament as part of the ancient medical concept of humorism , that four bodily fluids affect human personality traits and behaviours.<sup>[4]</sup>Centuries later around 149 A.D.,A Roman physiologist , Galen named "Sanguine", "Choleric" , "Melancholic" and "phlegmatic" after the bodily humors , respectively , Dr. Hahnemann refers to this in his books but major attention was actually paid by Knerr.<sup>[5]</sup>

Melancholic temperament are Affectionate, self-sacrificing, detail oriented, deep thinkers, quiet personality, patience, loyalty, mood extreme, anxious, sensitive, introvert, unsociable and pessimist. While the melancholic temperament comes with many benefits, these individuals are prone to developing mental health conditions, such as depression, anxiety, and mood disorders.<sup>[6]</sup>

The term "melancholia" is one of the oldest terms used in psychology. It has been around since Hippocrates introduced it in the fifth century B.C., and it means "Black bile" in Greek. The translation is fitting because Hippocrates believed that an excess of Black bile, one of what he labelled "The Four Humors" caused melancholia. The symptoms he categorized under melancholia are nearly identical to the symptoms we use today, including fear, not wanting to eat, insomnia, restlessness, agitation, and sadness.<sup>[7]</sup>

Hypothyroidism, a disease in which the thyroid gland does not make enough thyroid hormone, is the second most common endocrine disorder among women. Symptoms of hypothyroidism include fatigue, weight gain, alteration in cognition, infertility, and menstrual abnormalities.<sup>[8]</sup> It also include mental symptoms like anxiety, slow in thought and speech, slow reactions, poor learning and reduced efficiency in executive function, depression, passive and pessimistic in nature.

In this study we will try to understand the relation between the melancholic temperament and the psychiatric symptoms associated with hypothyroidism in women of reproductive.

### BACKGROUND

Psychiatric symptoms/disorders are common in patients with thyroid dysfunction. Thyroid hormone (TH) has important actions in the adult brain. Varying degree of psychiatric symptoms/disorders is common in patients with thyroid dysfunction both hypo- and hyper-thyroidism.<sup>[9]</sup>

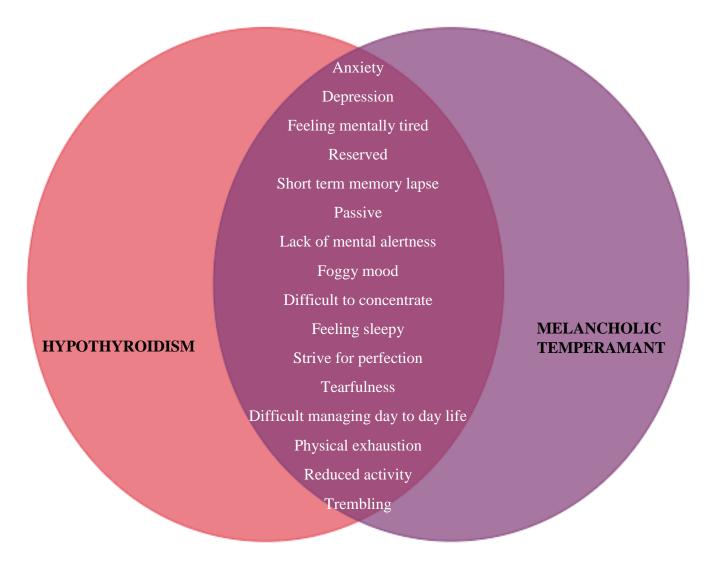
Thyroid dysfunctions have been recognized to cause significant manifestations in mental health. They may lead to disturbances in emotions and cognition. Both increase and decrease in thyroid function can cause mood abnormalities. Vice versa, depression can also go hand in hand with subtle thyroid dysfunctions.<sup>[10]</sup>

Even mild cases of hypothyroid state can cause depression. <sup>[11,12]</sup> Another study showed a prevalence of depression in 20.5% of the patients of hypothyroidism <sup>[13]</sup>. In cases of acute hypothyroidism, anxiety disorders occur in about 30–40% of patients<sup>[14,15]</sup>. Psychiatric manifestations usually appear first in cases of hypothyroidism. They form about 2–12% of the initial symptoms in about all of the reported cases. Initially, it starts with anxiety, memory lapses, progressive mental slowing, and speech deficits <sup>[16,17]</sup>. More severe hypothyroidisms can mimic melancholic depression and dementia.<sup>[18]</sup>

# **OBJECTIVE**

- To establish the association between melancholic temperament and hypothyroidism.
- To study the mental disturbance induced by thyroid dysfunction.
- To find the concurrence of melancholic temperament and natrum muriaticum prescription in hypothyroid patient.

# CHARACTERISTIC SIMILARITIES BETWEEN MELANCHOLIC TEMPERAMENT AND HYPOTHYROIDISM



## METHODOLOGY

A sample size of 30 cases will be selected from OPD's, IPD's & PHC's of Sarada Krishna Homoeopathic Medical College Hospital based on selective sampling method. The cases which fulfill the inclusion criteria will only be considered for the study. The thyroid profile will be studied and analyzed for confirmatory diagnosis of case and further it will be included and consent (ANNEXURE I) of the patient will be taken before including them in study. A detailed case taking will be done for understanding the whole picture of the patient and self-assessment questionnaire (ANNEXURE – II) will be applied for understanding the temperamant of the patient. Assessment and evaluation of the questionnaire will be done and scores will be calculated. The scoring will aid in understanding the temperament of the individual. Further on, the prescribed medicine for all the cases will be studied and analyzed so as to understand the therapeutic relationship of homoeopathic medicine natrum muriaticum in individuals with melancholic temperament and hypothyroidism, if any.

ANNEXURE – I	CONSENT FORM
ANNEXURE – II	SELF ASSESSMENT QUESTIONNAIRE

#### **INCUSION CRITERIA:**

- 1. Age: 18-45 years.
- 2. Patients with thyroid profile suggestive of hypothyroidism.

# **EXCLUSION CRITERIA:**

- 1.Age below 18yrs &above 45 yrs.
- 2.Patients who are already diagnosed with psychiatric disease.
- 3. Patients with history of anxiety and depression before hypothyroidism.

# **BRIEF PROCEDURE OF THE METHODOLOGY**

30 CASES FROM OPDS, IPDS & PHCS OF SARADA KRISHNA MEDICAL COLLEGE HOSPITAL BASED ON SELECCTIVE SAMPLING METHOD CASES WHICH FULFIL THE INCLUSION CRITERIA WILL ONLY BE TAKEN TFT CONFIRMATION AND DETAILED CASE TAKING WILL BE DONE ALONG WITH ASSESSMENT OF TEMPERAMENT QUESTIONNAIRE ANALYSIS AND EVALUATION OF THE SCORING TO UNDERSTAND THERAPEUTIC RELATION OF NATRUM MURIATICUM WITH HYPOTHYROIDISM AND MELANCHOLIC PATIENT IF ANY CONCLUSION OF THE STUDY

# **IMPLICATION**

- This study will help in understanding the relationship between melancholic temperament and hypothyroidism.
- This study will pave way to understand the mental and emotional disturbances that is caused due to thyroid dysfunction.
- This study will aid in identifying the effectiveness and also to evaluate if natrum muriaticum is a specific remedy for hypothyroidism in melancholic temperament.

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