ABSTRACT:

Thyroid affections are one of the most common of all autoimmune disorders in thyroiditis, glands are unable to store iodine and produces antibodies that circulate in plasma, and it causes inefficient production of hormones. It can also affect other systemic functions. This article is an attempt to overview types of thyroiditis and its homoeopathic therapeutic and reportorial approach.

KEYWORD:

Thyroiditis, Thyroid, Goiter, Homoeopathy, Hashimoto’s Thyroiditis.
INTRODUCTION:

Thyroiditis is an inflammation of the thyroid gland, of which there are numerous causes, both non – infectious and infectious. The most common cause is autoimmune(e.g., chronic lymphocytic thyroiditis or hashimoto’s disease). There is a female-to-male predominance of approximately 1.5:1. The lower frequency of 1.1% in Asia may be related to variations in regional, dietary iodine intake or genetic differences in susceptibility. An increased incidence is seen among patients with type 1 diabetes mellitus as well as associations with other autoimmune disorders(e.g., systemic lupus erythematosus, multiple sclerosis, antipituitary antibodies).

ETIO-PATHOGENESIS:

It is an autoimmune disorder whose principal manifestations are goiter and hypothyroidism. Thyroiditis is primarily a subclinical disease.

The etiology of hashimoto’s thyroiditis is multifactorial. It is estimated that genetic susceptibility contributes 70-80% towards the disorder. Specific contributors include HLA class II antigens, cytotoxic T-lymphocyte antigen-4(CTLA-4), protein tyrosine phosphatase non-receptor type 22, cytokines (e.g., TNF-alpha; INF-alpha; IL-2), thyroglobulin and the vitamin D receptor on thyrocytes. Environment factors contributes 20-30% towards the development of chronic thyroiditis. Many studies have confirmed an increase in thyroiditis in populations after iodine is introduced into their diet; interestingly, while grave’s disease is aggravated by smoking, there is decrease in TPO-Ab titer and hypothyroidism in smokers.

TYPES AND CLINICAL FEATURES:

1. **Chronic lymphocytic thyroiditis:** there is an enhanced presentation of thyroid antigens and a reduction in immune tolerance with an increase in Th-1 lymphocyte activity and destruction results from several effects including cytokine-induced apoptosis and ICAM-1-mediated CD8+cell- mediated cytotoxicity.Clinically, almost all patients have antithyroid antibodies(tabs) in their serum, most commonly antithyroid peroxidase(TPO-Ab) but also antithyroglobulin(TG-Ab).10%-20% of
adults have detected tabs, with a greater prevalence in women and older individuals. Patients often have a small goiter and are asymptomatic with a normal serum thyrotropin (TSH). The natural development, however, is progressive damage to the thyroid follicles with subsequent evolution to subclinical, then overt hypothyroidism. This progression may be slow, occurring over years, and the early symptoms (fatigue, weight gain) are often unrelated to thyroid dysfunction; thus; measuring TSH (and when elevated, a free T4) is an important component of evaluating a patient’s symptoms. While Hashimoto's thyroiditis is almost always painless, there are occasional patients with pain, and so must be considered in the differential diagnosis.

2. **Silent thyroiditis; (non postpartum)**: silent thyroiditis is painless inflammation of thyroid that produces a transient hyperthyroid state. Clinical features include palpitations, weight loss, nervousness, heat intolerance, and fatigue.

3. **Postpartum**: it is a syndrome of thyroid dysfunction that occurs within the first year following parturition. It is usually characterized by transient painless thyrotoxicosis with a low radioactive iodine uptake, often followed by a hypothyroid phase that is then followed by thyroid recovery. It is present with fatigue, palpitations, heat intolerance, nervousness, emotional liability, and other hyperthyroid symptoms. Many patients will have some enlargement of the thyroid. It is universally painless.

4. **Infectious/post-infectious thyroiditis**: acute infectious thyroiditis is an inflammatory process caused by the invasion of thyroid by bacteria, mycobacteria, fungi, protozoan, or flat worms. Infectious thyroiditis is rare disorder usually present with pain and may have a swollen, hot, and tender thyroid. As a result, affected individuals may avoid extension of their neck due to pain, swallowing may be painful, and dysphagia may be present.

5. **Subacute**: it is painful, inflammatory thyroid condition associated with thyrotoxicosis. In the past, it has also been called granulomatous thyroiditis, giant cell thyroiditis, non-infectious thyroiditis, acute nonsuppurative thyroiditis, and de quervain's thyroiditis. Usually presents with acute onset of malaise, feverishness,
and pain in the region of the thyroid gland. The pain may radiate from the thyroid to the jaw and to the ears, or down to the anterior chest wall. Coughing, swallowing, turning the head, or wearing tight clothing around neck can aggravate the discomfort. Approximately one-third to one-half of patients may present with unilateral thyroid pain, and one third of patients can have migratory discomfort wherein the pain spreads from one thyroid lobe to the other, so-called “creeping thyroiditis”.

6. **Riedel’s thyroiditis**: this is an aggressive fibroinflammation condition of uncertain etiology which involves the thyroid and tissues surrounding the thyroid gland. It should be distinguished from a fibrosing form of hashimoto’s thyroiditis, which is limited to the thyroid gland. Clinical features may present with tracheal narrowing, dysphagia, vocal cord paralysis/hoarseness, or neck pain.

7. **Radiation thyroiditis**: Radioactive $^{131}$I and external beam radiation are used to treat thyroid disease. Radiation thyroiditis with a thyrotoxic phase has been reported following radiation treatment with both forms of radiation therapy. Radiation presumably causes a destructive thyroiditis with the release of performed thyroid hormone into the bloodstream.

8. **Trauma induced thyroiditis**: several reports of trauma-induced thyroiditis have been described, and this condition may be associated with thyrotoxicosis. Thyroid biopsy, parathyroid surgery, surgical trauma, and trauma induced by a seat belt have all been reported to cause thyrotoxicosis(111-113). The thyroid may be tender due to trauma. The thyrotoxicosis is transient and associated with low uptake of radioactive iodine.

**INVESTIGATIONS:**

1. Thyroid functions tests measure the amounts of hormones (thyroid-stimulating hormone or TSH, T3, and T4) in the blood.
2. Thyroid antibodies that include antithyroid (microsomal) antibodies (TPO) or thyroid receptor stimulating antibodies (TRAb).
3. Erythrocyte sedimentation rate (ESR) indicates inflammation by measuring how fast red blood cells fall. The ESR is high in sub-acute thyroiditis.
4. Ultrasound (US), sonogram of the thyroid, can show a nodule in the thyroid gland, a change in blood flow (Doppler mode) and echo texture (intensity/density) of the gland.

5. Radioactive iodine uptake (RAIU) measures how much radioactive iodine is absorbed by the thyroid gland. The amount is low in thyrotoxic phase of thyroiditis.

**Homeopathic Medicines as Per the Common Symptoms of Thyroiditis:**

- **ENLARGED THYROID OR GOITER:** Iodium, Natmur, aqua marina, thyreoidinum, spongiatosta, calcarean carbonica, fucus vesiculosus, iris versicolor, badiaga, bromium, calcareaflourica, calcarean iodata, mercuriousiodatusruber, lapis albus, belladonna.

- **HAIR LOSS:** natrium mur, lycopodium, acid phos, sepia.

- **UNEXPLAINED WEIGHT GAIN:** iodothyrinum, Phytolacca berry, calcarean carbonica, fucucversiculosus, graphites.

- **HIGH CHOLESTEROL:** strophanthus hispidus, baryta muriatica, aurum iodatum, plumbumiodatum, polygonum punctatum.

- **A PALE, PUFFY FACE:** ferrummetallicum, sepia, chinchona officinalis, calcarean carbonica.

- **DEPRESSION:** sepia, pulsatilla, aurum metallicum.

- **FELLING COLD:** psorinum, silicea, calcarean carbonica.

- **PROLONGED OR EXCESSIVE MENSTRUAL BLEEDING:** sepia, calcareacarbonica, ferrummetallicum, chincona officinalis.

- **FATIGUE:** cinchona officinalis, calcareacarbonica, phosphoricumacidum, iodinum, natrium muraticum, alfalfa.

- **CONSTIPATION:** bryonia alba, alumina, nuxvomica, cascara sagrada.

- **DIFFICULTY IN BECOMING PREGANAT:** agnus castus, borax veneta, natrium phosphoricum, calcareacarbonica.
THERAPEUTIC APPROACH OF HOMOEOPATHIC MEDICINES:

- **Hedera helix**: A rare known plant remedy established by mezger. Used in the affections of thyroid like hyperthyroidism, colloidal goiter, thyrodities- hyperplastic, ligneous thyrodities.

- **Calcarean carb.**: It has action on the glands especially on pituitary and thyroid. Sensitive to light. Lachrymation in open air and early in morning. Fair, fat, flabby personality. Confused, low spirited, swallowing difficult, goiter and palpitation at night. Worse from mental and physical exertion.

- **Natrum mur.**: Effective for goiter, hyperthyroidism, addison's disease, diabetes. Grief is always present. Muscles weak and stiff.

- **Thyroidinum**: Prepared from dried thyroid gland of sheep. Used in cases of goiter with excessive obesity. Patients with paleness, amblyopia, uterine fibroid. Great weakness and hungry yet losing flesh. hypothyroidism with weakness, easy fatigue, weak pulse, tendency to faint, palpitations.

- **Iodinum**: It is suited to thin, dark complexed persons with enlarged lymphatic glands. Eats well yet loses flesh. Great debility and perspire easily with slightest exertions. Ravenous hunger and marked thirst.

- **Lycopodiumclavatum**: It is useful in patients with grauvogl'snitrogenoid constitution. Symptoms runs from left to right. Craving for food that is hot and sweet. Offensive perspiration.

- **Lachesis mutus**: Defective vision, extrinsic muscles too weak to maintain focus. Great loquacity, sadness in morning restless and uneasy persons. Jealous, suspiciousness is marked. Craving for alcohol.

REPERTORIAL APPROACH: Rubrics of thyroiditis in “A Concise Repertory of Homoeopathic Medicines” by Dr S.R Phatak:

- FACE, Pale.
- FACE, Puffy, bloated.
- FATIGUE.
- CONSTIPATION. Remedies in general.
• OBESITY.
• HAIR, Falling.
• GOITRE.
• SADNESS, low spirits, mental depression.
• MENSES. Protracted, too long.

Rubrics in “New Manual of Homoeopathic Materia Medica And Repertory” by William Boericke:

• FACE. APPEARANCE-CONDITION-Bloated, puffy.
• FACE. APPEARANCE-CONDITION-Pale.
• FEMALE SEXULA SYSTEM. MENSTRUATION. Protracted.
• GENERALITIES. OBESITY (adiposis, corpulence).
• GENERALITIES. Thyroid (Goitre, bronchocele).
• GENERALIRIES. Thyroid- (EXOTHALMIC GOITER- Basedow’s disease).
• MIND. Melancholic, despondent, depressed, low spirited, gloomy, apprehensive, “blues”.
• ABDOMEN. Constipation.
• HEAD. HAIR- Falling out (alopecia).

DISCUSSION AND CONCLUSION: Homoeopathic medicines has been strong therapeutic approach in cases of hormonal disorders. Medicines prescribed on the basis of totality of symptoms and miasmatic analysis have effective results but sometimes due to lack of time physician can go for quick prescription through therapeutic approach. There are numerous causes including genetic and non-genetic factors like changes in sex hormones (particularly in women), viral infections, certain medications, exposure to ionizing radiation, and excess consumption of iodine (a substance involved in thyroid hormone production) in which homeopathy is effective.
REFERENCES: