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## **Thyroid Eye Disease (Ted) And Ayurveda - A Review**

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### **Abstract-**

*Thyroid eye disease (also known as Graves' ophthalmopathy) is a complex orbital inflammatory disease, which can be sight threatening, debilitating and disfiguring. This overview discusses the presentation, ophthalmic clinical features, investigations and ayurvedic treatment of thyroid eye disease.*

**Keywords:** Thyroid eye disease, Graves' ophthalmopathy, Euthyroidism, ayurvedic treatment

### **Introduction-**

Thyroid eye disease is also known as ocular Graves' ophthalmopathy (OGD), dysthyroid ophthalmopathy, thyrotoxic/ endocrine exophthalmos, malignant exophthalmos. It is most important extrathyroidal manifestation of autoimmune thyroid disease such as Graves' disease and Hashimoto thyroiditis. It is also most common orbital disorder in adult worldwide and commonest cause of unilateral or bilateral axial proptosis, acquired strabismus or lid retraction. TED may lead to visual dysfunction, ocular discomfort, facial disfigurement and significantly decreased quality of life

### **Etiology-**

It may be a part of Graves disease (syndrome consisting of hyperthyroidism, goiter & eye sign) or may be associated with hypothyroidism or even euthyroidism. Thus a direct causative connection between the thyroid dysfunction & the ocular changes remains elusive.

### **Clinical features-**

#### **A) Lid signs-**

- retraction of upper lids producing the characteristic staring & frightened appearance
- lid lag
- fullness of eyelids due to puffy oedematous swelling
- difficulty in e-version of upper lid
- Infrequent blinking.

#### **B) Conjunctival signs-**

- Conjunctival chemosis
- hyperaemia.

#### **C) Ocular motility defects-**

- these range from convergence weakness to partial or complete immobility of one or all of the extrinsic ocular muscles.

#### **D) Exophthalmos-**

- it is common and classical sign of the disease
- it is may be unilateral or bilateral.

#### **E) Exposure keratitis and symptoms of ocular surface discomfort**

#### **F) Optic neuropathy -**

**Classification-** Acc. to American Thyroid association

1. **class 0-** no sign and symptoms.
2. **Class 1-**only sign no symptoms (lid retraction, lid lag, or proptosis)
3. **Class 2-**soft tissue involvement with sign and symptom (lacrimation, photophobia, lid or conjunctival swelling)
4. **Class 3-**proptosis is well established.
5. **Class 4-**extraocular muscle involvement
6. **Class 5-**corneal involvement.
7. **Class 6-**sight loss due to optic nerve involvement with disc pallor or papilloedema and visual field defects

**Investigation-**

1. **Thyroid function test-** serum T<sub>3</sub>, T<sub>4</sub>, and TSH and estimation of radioactive iodine uptake
2. **Ultrasonography-** both A scan and B scan show enlargement of extra ocular muscle. It can also demonstrate orbital involvement and optic in some cases.
3. **Ct scan-** enlargement of the extra ocular muscle is a common finding. Optic nerve compression can be well demonstrated by CT-scan

**Treatment-**

**A) Medical treatment-**

- Antithyroid drugs- carbimazole or propyl thiouracil and Beta- blockers
- Radioactive iodine therapy

**B) Ocular treatment-**

- **Topical therapy-** decongestant eye drop and lubricants, in the form of symptomatic relief. Guanethidine(5%) eye drop- for lid retraction

- **Systemic therapy-**

Corticosteroids- are indicated for optic neuropathy and rapidly progressive exophthalmos.

A high dose of 80-100mg /day oral prednisolone is started initially and then tapered.

Radiotherapy- it is reserved for those patients who are unresponsive to steroid therapy

- **Surgical therapy-**

- Lateral tarsorrhaphy to prevent exposure keratitis.
- Recession of levator and mullers muscle to correct lid retraction
- Extraocular muscle surgery to correct diplopia and squint.
- Blepharoplasty to remove excess fat and redundant skin from around eyelids.
- Orbital decompression.

**According to Ayurveda-**

As mentioned in Aurveda agni, tridosha, dhatu and mala function consequently so there is samavastha of human body. If one of them get disturbed there will be diseased condition in our body. All these factors also controle the thyroid gland so disturbance in these biohumours can cause disorders of thyroid hormone. Disease of thyroid gland generally not explained in ayurvedic text but sign and symptoms of some disease e.g galagand, arbuda can correlated with disorder of thyroid gland.

From the Ayurvedic view the initial causes are diet and lifestyle factors that imbalance the digestive fire(jatar agni) and metabolism( dhatu agni) and disrupt the balance of the doshas (Vata/Pitta/Kapha). Stress and overwork also play an enormous part as this causes imbalanced Agni, vitiation of the doshas and the direct depletion of Ojas (which is considered the final essence of tissue metabolism and the primary support for our immune system).

In Ayurveda, the emphasis is always on treating an individual rather than simply treating a disease state so every treatment program will look slightly different depending on each person's unique situation. Avoidance of any dietary or lifestyle activities that directly deplete Ojas. In addition, an approach to diet must be adopted that strengthens both the central digestive fire (Jathara Agni) and the tissue metabolism (Dhatu Agnis). Any doshic imbalance that is present must also be rectified.

A variety of very specific Traditional herbal formulations are available that help support good digestion and metabolism and facilitate the elimination of Ama. They aid circulation through the channels and ensure the proper nourishment of the tissues. Herbs that rectify the imbalanced doshas and aid the production of healthy Ojas (therefore addressing the auto immune aspect of the condition) must also be prescribed.

Ayurvedic therapies are also incredibly beneficial for these conditions. Pindaswed (massaging the body with a heated bolus of specific herbs) is excellent for reducing Ama in the tissues and channels, bringing immediate relief from swelling, pain and stiffness; while Shirodhara (the drizzling of warm, medicated oil on the forehead) is very effective in relieving stress and nervous system tension and helping to balance hormone production.

### **Conclusion-**

TED is a self-limiting orbital inflammatory condition with an active (inflammatory) and inactive phase. Risk factors include female gender, middle age and smoking. The majority of patients with TED have hyperthyroidism with the most common cause being Graves' disease. There are numerous ophthalmic features; the two most serious being optic neuropathy and exposure keratopathy.

The Ayurvedic approach to treatment can go hand-in-hand with more conventional medical approaches. While one can help to manage your symptoms, the other can affect change at the root of the disease process - strengthening digestion, reducing toxins, pacifying aggravated doshas and nourishing Ojas.

### **References-**

- i. Maharshi Sushruta, Sushruta Samhita, Sutrasthana, Volume, 15/47, Edited by Anantram Sharma, Chaukhamba Surbharati Prakashan, Varanasi, Edition 2010.
- ii. Vagbhata, Ashtanghrudayam, Sutrasthana, Doshabhedhiya Adhyaya, 12/3, Edited by Kaviraj Atridev Gupta, Vaidya Yadunandan Upadhyaya, Chaukhamba Prakashan, Edition 2011.
- iii. Jack J Kanski, Clinical Ophthalmology, Orbit, Edited by Ken Nischal, Elsevier Saunders publication, Edition 2011.
- iv. Parsons' Disease of The Eye, Edited by Ramanjit Sihota & Radhika Tandon, Elsevier publication, Edition 2015.
- v. Text Book Of Salakya Tantra, Edited by Prof. Udaya Shankar, Chaukhambha Visvabharati Varanasi publication, Edition 2012.
- vi. Compressive Ophthalmology, Edited by A K. Khurana, New Age International publication, Edition 2011
- vii. Essential of Ophthalmology, Edited by Samar K. Basak, Current Book International publication, Edition 2015