



BLEPHAROSPASM (DYSTONIA OF EYELIDS) - AN AYURVEDIC PREVIEW

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ABSTRACT Blepharospasm i.e. dystonia of eyelid is a condition of an eye characterized by involuntary contraction or spasm of eyelid muscles; leading to closure or excessive blinking of the eyelids. Some systemic association with Blepharospasm include Muscle sclerosis, Parkinson's disease, Wilson's disease, Tourette Syndrome, Cervical Dystonia, Meige Syndrome etc. In Ayurvedic samhita's also Blepharospasm is mentioned as a lakshana, under different varmagata roga's by different Acharya. The principle pathogenesis involves in Blepharospasm is complex interaction between neural pathways and muscle control mechanism.

KEYWORDS : Blepharospasm (BEB), varmagata roga, Krucchonmilan.**INTRODUCTION**

Blepharospasm is involuntary closure of both eyelids. Benign essential Blepharospasm (BEB) is a bilateral condition and a form of focal dystonia characterized by episodic contraction of the eyelid protractor muscles (orbicularis oculi, procerus, and corrugator superciliaris) and is not associated with another disease. BEB needs to be differentiated from Blepharospasm that can exist as part of a specific syndrome (i.e. Meige syndrome) or systemic disease (i.e. extrapyramidal disorders) and that which occurs secondary to ocular irritation and medication. Prevalence of this disease is 1.6-30/100,000.

AIM:-

To understand Blepharospasm (dystonia of the eyelid) in terms of its clinical features, systemic associations, management and Ayurvedic interpretation, particularly as described under Varmagata roga by different Acharyas.

OBJECTIVE:-

Review the clinical features, causes, current management strategies, and exploring Ayurvedic concepts of vata vitiation and ocular strain in relation to Blepharospasm.

MATERIALS AND METHODOLOGY:-**Etiology**

The exact cause of benign essential Blepharospasm is unknown. Some evidence using functional neuroimaging suggests dysfunction within the basal ganglia. In rare cases, genetics have been reported to play a role.

Epidemiology

Age: onset most commonly occurs during years 40-60

Gender: Female > Male (2-4:1)

Risk Factors

Variable risk factors for Blepharospasm have been reported:

1. Head or facial trauma.
2. Family history of dystonia or tremor.
3. Reflex Blepharospasm is reportedly triggered by severely dry eyes and blepharitis, intraocular inflammation, meningeal irritation, light sensitivity.
4. Stress may exacerbate benign essential Blepharospasm.
5. Medications, such as those used to treat Parkinson's disease, have been associated with Blepharospasm.

Pathophysiology

Basal ganglia dysfunction

Over activity of 7th cranial nerve (facial nerve)

Simultaneous contraction of eyelid protractors and retractors

Ion channelopathy- neuronal hyper excitability

Trigeminal system sensitization (due to photophobia)

Abnormal motor control of eyelids

Forceful, repetitive eyelid spasms (Blepharospasm)

Symptoms And Signs:-

- Involuntary and uncontrollable blinking and squinting
- Eye irritation
- Having a hard time keeping eyelids open
- Sometimes closed for long periods of time, which causes substantial visual disturbance or functional blindness
- Sensitivity to light.

Clinical Diagnosis:-

The diagnosis of Blepharospasm is clinical and is made by careful history taking and physical examination.

Medical Therapy for Benign Essential Blepharospasm (BEB)**First Line Treatment**

Botulinum toxin A injections: OnabotulinumtoxinA (Botox), incobotulinumtoxinA (Xeomin), or abobotulinumtoxinA (Dysport) into or adjacent to the orbicularis oculi muscle.

Injection frequency: Every 3-4 months.

Dosage: 2.5 to 5 units per site, 4 to 8 sites per eye.

Onset and duration: Action starts in 2-3 days, peaks at 7-10 days, and lasts 3-4 months.

Second Line and Adjunctive Treatments

Oral medications: Rarely effective; may help mild cases or prolong injection intervals.

FL-41 tinted glasses: Helpful for patients with photosensitivity.

Other options: Methylphenidate (Ritalin) may help; acupuncture or herbal supplements noted by some patients.

Follow-up and Surgery

Follow-up: 1 month post-injection, then every 3-4 months.

Surgery: For patients poorly responsive to botulinum or with disabling symptoms; includes myectomy or frontalis suspension for apraxia of eyelid opening.

Complications and Prognosis

Complications: Transient issues like bruising, ptosis, ectropion, epiphora, and diplopia.

Prognosis: 90% improve with botulinum injections; continued injections needed.

VARTMAGATAROGAS**VARTMA:-**

- Number:- 2 (upper and lower)
- Composition:- made by bahya patal
- Function:- covering the eye from outside
- Action:- to open and close an eye i.e. unmesha and nimesha

So, vartma can be structurally and functionally said as eye lids of an eye. Any pathology involved in this structure will lead to cause vartmagata roga's.

Blepharospasm is explained as a symptoms under different disease by different Acharya are enlisted below:-

REFERENCE	VARTMAGATA ROGAS HAVING BLEPHAROSPASM AS A LAKSHANA	DOSHA	OTHER LAKSHANA
SUSHRUTA	VATAHATA VARTMA	VATA	Eyelid Sometimes closed for long periods of time.
	NIMESH	VATA	Uncontrolled blinking
VAGBHATA	KRUCCHON MILAN	VATA	Eye irritation, hard time keeping eyelids open.
	VATAHATA	VATA	Incomplete closure of eyelid.
	NIMESH	VATA	Frequent blinking
BHAVPRAKASH	KUNCHAN	VATAPRADHAN TRIDOSH	visual disturbance or functional blindness
	VATAHATA VARTMA	VATA	Eyelid Sometimes closed for long periods of time.
	NIMESH	VATA	Involuntary blinking
YOGARATNAKAR	KUNCHAN	VATAPRADHAN TRIDOSH	visual disturbance or functional blindness
	VATAHATA VARTMA	VATA	Eyelid Sometimes closed for long periods of time.
	NIMESH	VATA	Involuntary blinking
ASHTANGSANGRAH	KRUCHHON MILAN	VATA	Eye irritation, hard time keeping eyelids open.
	VATAHATA	VATA	Eyelid Sometimes closed for long periods of time.
	NIMESH	VATA	Frequent blinking
MADHAVNIDAN	NIMESH	VATA	Uncontrolled blinking
	KUNCHAN	VATAPRADHAN TRIDOSH	visual disturbance or functional blindness
	VATAHATA	VATA	Eyelid Sometimes closed for long periods of time.

SHARANDHARA	KROCCHON MILAN	VATA	Eye irritation, hard time keeping eyelids open.
	VATAHATA	VATA	Eyelid Sometimes closed for long periods of time.
	NIMESH	VATA	Frequently blinking

KRICCHONMILAN:-

- DOSHA:- VATA
- SADHYASADHYTWA:- SADHYA
- According to vagbhata Acharya :- there is vata dosha prakop in vartma ashrayi sira (vatavaha sira i. e. nerves) because of that symptoms seen as dystonia in vartma, watering from eyes, unable to open eyelids particularly at morning but get relief after rubbing the eyelids and can able to open eyelids after strain.

TREATMENT:-

- 1) SNEHAN: - draksha kalaka and kwath siddha puran ghrita with sharkara sevan at night.
- 2) SWEDAN: - swedan with erand pottali boiled in milk.
- 3) NASYA (SNIGDHA DRAVYA)
- 4) DHOOMPANA (SNEHIK)
- 5) ANJAN (SNEHAN)
- 6) TARPAN
- 7) PUTPAKA
- 8) BASTI (WITH VATGHNA DRAVYA)
- 9) DAHAN (BINDU TYPE):- Tamra shalaka is used, distance between two dahan spot upto one green gram.

VATAHATA VARTMA:-

- DOSHA:- VATA
- SADHYASADHYATWA:- ASADHYA
- Eyelid remains open and movement less due to eyelid muscle weakness. It can be painful or painless both.

KUNCHAN:-

- DOSHA:- TRIDOSH
- SADHYASADHYTWA:- ASADHYA
- Eyelid spasm is happened due to vatapradhan tridosh prakop and eyesight is also get affected over a long period of time.

NIMESH:-

- DOSHA:- VATA
- SADHYASADHYTWA:- ASADHYA
- There is frequent closure and opening of the eyelid due to vata dosha prakopa in the nimeshini sira i.e. sira which is responsible for opening and closure of the eyelid

DISCUSSION:-

As stated in ayurvedic text in pathology of krucchonmilan there is vata dosha prakop in vartma ashrayi sira (vatavaha sira i. e. nerves) because of that symptoms seen as dystonia in vartma (blepharospasm) in correlation with modern pathology of blepharospasm cranial nerve dysfunction and abnormal motor control of eye lid muscle is seen.

Here mainly vata shaman chikitsa is carrying so as to get relief from the symptoms of vataprakop. As among five type of vata vyana vayu is responsible for closure and opening of the eyelid.

व्यानो इदिस्थितः कृत्स्नदेहचारी महाजवः

गत्यपक्षेपणोत्क्षेपनिमेषोन्मेषादिकाः

प्रायः सर्वाः क्रियास्तस्मिन् प्रतिबद्धाः शरीरिणाम्

Netraroga is indicated with ghrutapana at night. As netra is tejas mahabhuta Pradhan indriya and at night netra gets relief due to absence of sunlight according to principle yatha pindi tatha bramhanda.

Oleation therapy (snehana) in Ayurveda involves the internal snehapana or external application medicated oil. Oils used in oleation (such as ghee, sesame oil or medicated herbal oil) have vata- pacifying properties. Since Blepharospasm is often linked to aggravated vata or neuromuscular irritability, oleation reduces hyperexcitability of nerves.

Sedation (swedan) improves elasticity of muscle fibers by increasing muscle temperature it reduces sustained contractions of orbicularis oculi, which are overactive in Blepharospasm. Local vasodilation enhances oxygen delivery and removal of metabolic byproducts like (lactic acid) that can irritate nerve and muscles. Heat reduces the firing rate of muscle, spindle activity is reduced so reflex spasm decreases. It alters ion channel behavior in peripheral nerve and calms excessive impulses causing spasm.

CONCLUSION:-

In this review article we tried to correlate the Blepharospasm disease with the vartmagata rogas explained in Ayurvedic texts.

In sadhya vyadhi, krucchonmilan vartmaroga is due to vata dosha vitiation.

In krucchonmilan, traditional therapies of snehan, swedan, nasya, dhoomapana, anjan, tarpan, putpaka and dahan karma are of the highest significance.

Therefore by using both a preventive and curative strategy, the basic principles of Ayurveda can be utilized to restore the normal functions of the eyelids.

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