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## AYURVEDIC REVIEW ON VATAJ ABHISHYANDA W.S.R TO ALLERGIC CONJUNCTIVITIS

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#### **ABSTRACT**

Ayurveda is an ancient Indian medical science that deals with life. According to Vaghbhata Shalakyatantra or Urdhwang is fourth branch. Shalakyatantra is a one of the most important division. the science which deals with the treatment of the disease of the head and neck, especially with the eye, ear, nose, throat and dental diseases. Aacharya Sushruta has mentioned various Netrarogas and their treatment in Uttartantra. Allergic conjunctivitis is one of the most common eye disorders that affect people of all age groups and can be correlated to Vatajaabhishyanda (Allerghic Conjunctivitis) in Ayurvedic medicine based on their signs and symp- toms. Abhishyanda (Conjunctivitis) is the root cause for most of the eye disorders and must be treated early with effective interventions or it might lead to severe complications and would be very perplexing to save the eyesight.

**KEYWORDS:** Abhishyanda, Vatak, Ayurved, Shalyatantra.

#### INTRODUCTION

Abhishyanda is the root cause of almost all the eye disorders and must be treated as soon as possible, otherwise its complications will become severe and difficult to save the eye sight.<sup>[1–4]</sup> If Abhishyanda takes a chronic course it may lead to Vataja Adhimantha, Hatadimantha, Akshipakatyaya, Avranashukla, and so on.<sup>[1]</sup> Vataja Abhishyanda is characterized by Toda

(Pricking pain), Sangharsha (foreign body sensation), Achchashruta (watery discharge), Alpa Shopha (mild chemosis), Vishushka Bhava (feeling of dryness), Parushya (dryness),  $^{[5]}$  and so on, which are very similar to most of the signs and symptoms of Simple Allergic Conjunctivitis. Based on the similarities of signs and symptoms, Vataja Abhishyanda can be co-related with Simple Allergic Conjunctivitis. The prevalence is 5 - 22% in the general population and recurrence found in 41 - 62% of the cases.  $^{[6,7]}$ 

Simple allergic conjunctivitis is the most common form of ocular allergy (prevalence 5 – 22%). It is a hypersensitivity reaction to specific airborne antigens. The disease Vataja Abhishyanda, which is due to vitiation of Vata Pradhana Tridosha is comparable with this condition. The management of simple allergic conjunctivitis in modern ophthalmology is very expensive and it should be followed lifelong and Ayurveda can provide better relief in such manifestation.

#### TYPES OF CONJUNCTIVITIS

A. Infective Conjunctivitis B. Allergic Conjuctivitis C. Cicatricial Conjunctivitis D. Toxic Conjuctivitis.

- A. INFECTIVE CONJUNCTIVITIS: 1. Bacterial conjunctivitis Acute bacterial conjunctivitis Hyperacute bacterial conjunctivitis Chronic bacterial conjunctivitis Angular bacterial conjunctivitis. 2. Chlamydial conjunctivitis Trachoma Adult inclusion conjunctivitis Neonatal chlamydial conjunctivitis. 3. Viral conjunctivitis Adenovirus conjunctivitis Epidemic keratoconjunctivitis Pharyngoconjunctival fever Enterovirus conjunctivitis Molluscum contagiosum conjunctivitis Herpes simplex conjunctivitis 4. Opthalmia neonatorum 5. Granulomatous conjunctivitis Parinaud oculoglandular syndrome.
- **B. ALLERGIC CONJUNCTIVITIS:** 1 Simple allergic conjunctivitis Hay fever conjunctivitis (Rhino conjunctivitis) Seasonal allergic conjunctivitis Perennial allergic conjunctivitis 2 Vernal keratoconjunctivitis (VKC) 3 Atopic keratoconjunctivitis (AKC) 4 Gaint papillary conjunctivitis (GPC) 5 Phlyctenular conjunctivitis (PKC) 6 Contact dermoconjunctivitis (Drop conjunctivitis).
- C. CICATRICIAL CONJUNCTIVITIS- Occular mucous membrane pemphigoid •
   Stevens Jonhson syndrome Toxic epidermal necrolysis Secondary Cicatricial conjunctivitis.

#### D. TOXIC CONJUNCTIVITIS. ALLERGIC CONJUNCTIVITIS

Atopy is genetically determined predisposition to hypersensitivity reactions upon exposure to specific environmental antigens. Clinical manifestations include the various forms of allergic conjunctivitis, as well as Hay fever (seasonal allergic rhinitis), asthma and eczema. Allergic conjunctivitis is a Type I (Immediate) hypersensitivity reaction, mediated by degranulations of mast cells in response to the actions of IgE. There is evidence of an element of Type IV hypersensitivity in at least forms.

#### ACUTE ALLERGIC CONJUNCTIVITIS

Acute allergic conjunctivitis is a common condition caused by an acute conjunctival reaction to an environmental allergen, usually pollen. It is typically seen in younger children after playing outside in spring or summer. Acute itching and watering are common, but the hellmark is chemosis, which is frequently dramatic and worring to the child and parents. Treatment is not usually required and the conjunctival swelling settles within hours as the acute increase in vascular permeability resolves. Cool compresses can be used and a single drop of adrenaline 0.1% may reduce extreme chemosis.

**SIMPLE ALLERGIC CONJUNCTIVITIS:** These common an acute or subacute urticarial condition are distinguished from each other by the timing of exacerbations, thought to relate principally to differing stimulating allergens in each. Simple allergic conjunctivitis ia a mild, non-specific allergic conjunctivitis characterized by itching, hyperaemia and mild papillary response.

#### Nidana Or Aetiology

Like any other disease of the eyes, no specific and separate cause of Abhishyanda has been mentioned in Ayurvedic texts. Nevertheless, common causes that are described for all eye diseases are applicable to Abhishyanda as well. In addition, Sushruta while deal-ing with Aupsargikaroga (communicable disease) in Nidanasthana, has enumerated Abhishyanda as one of the Aupsargikaroga and has given the causative fac-tors as contact with diseased person, inhalation of expired breath of diseased one (Expiration), eating to-gether, sleeping together and use of garments, orna-ments, cosmetics/ointment used by diseased person etc. Samprapti/Pathogenesis In Shastras, we do not find the Samprapti (pathogene-sis) of Abhishyanda in particular, but Samanya Sam-prapti (general pathogenesis) for all eye diseases is explained and it is applicable for Abhishyandatoo. This is detailed by Sushruta<sup>[8]</sup> that the Abhishyanda caused due to the unwholesome dietary and behavioral schedule, in

which the deranged Dosha (humors) move towards the upper part of body through various Sira (blood channels), gets accumulated in eye as a whole and produces dreadful disease in specific parts of eye and that's known as Abhishyanda. This ailment presents in different stages of Kriya Kala (stage wise disease management process of Ayurveda) such as-Sanchaya (stage of accumulation of doshas), Prakopa (stage of aggravation ofdoshas), Prasara, (stage of liquefication and spreading of doshas) Sthanasamshraya (stage of invasion of tissues and lodgment of doshas in dhatus or stage of premonitory symptom), Vyakta (stage of manifestation) and Bhedavastha (stage of complications)

**PATHOLOGY:** Pathological features of simple allergic conjunctivitis comprise vascular, cellular and conjunctival response. a) Vascular response Vascular response is characterised by sudden and extreme vasodilatation and increased permeability of vessels leading to exudation. b) Cellular response: Cellular response is in the form of conjunctival infiltration and exudation in the discharge of eosinophils, plasma cells producing histamine and histamine-like substances. c) Conjunctival response: Conjunctival response is in the form of boggy swelling of conjunctiva followed by increased connective tissue formation and mild papillary hyperplasia.

CLINICAL FINDING: Symptoms Itching, Watering, Redness, Sneezing, Nasal discharge, Mild photophobia, Burning sensation. Signs- Normal vision, Conjunctival hyperamia, Chemosis- which gives a swollen juicy appearance to the conjunctiva, Mild papillary reaction, Oedema of lids. INVESTIGATIONS: Investigations are generally not performed although conjunctival scraping in more active cases may demonstrate the presence of eosinophils. Skin testing for particular allergens is rarely required.

**DIAGNOSIS:** Diagnosis is made from 1) Typical signs and symptoms. 2) Normal conjunctival flora 3) Presence of abundant eosinophils in the discharge.

**TREATMENT:** 1. Avoid an allergen. 2. Artificial tear drops. 3. Decongestants 4. Antihistamines 5. Mast cells inhibitors 6. Dual action antihistamine and mast cell stabilizers 7. Combined preaparation 8. Non-steroidal anti-inflammatory drugs 9. Topical steroids 10. Oral antihistamines.

#### **DISCUSSION**

- 1. AVOID OF ALLERGENS: Simple allergic conjunctivitis i.e. Seasonal allergic conjunctivitis and perennial allergic conjunctivitis prevention- people who know what causes their allergic conjunctivitis can help prevent the condition by avoiding their triggers such as dust, grass, pollen and mites, animal dander etc. Allergic triggers can be avoided by: • Using sunglasses to act a barrier for airborn allergens. • Using hypoallergic bedding. • Washing sheets in hot water. • Minimising animal exposure, if animal is believed to trigger allergic symptoms. • People who do not know what causes their allergic conjunctivitis may consider counsulting an allergy specialist.
- 2. OCCULAR LUBRICANT: Artificial tears drop for mild symptoms. Ocular lubricant and refrigerating eye drops are usually the first type of treatment for individuals with mild to moderate symptoms. • Example – Hypromellose Carmellose Carboxymethylcellulose. • Lubricant eye surface, making it easier for the eye to remove allergens from its surface.
- **3. OCULAR DECONGESTANT:** The symptoms of allergic conjunctivitis arise because the chemical released in response to the allergic trigger prompt a number of changes and inflammation. The small blood vessels in the eye enlarge, contributing to redness, itchiness and ocular discomfort. • Decongestant are a type of medication available as an eye drop. • They keep the small blood vessels constricted, and so may provide some relief from allergic conjunctivitis. • Decongestant- Nephazoline hydrochloride Tetrahydrozoline hydrochloride.
- 4 ANTIHISTAMINES Histamine is released by cells in response to an allergic trigger, and causes itching, enlargement of the blood vessels and number of other inflammatory changes. • Antihistamine agents attach to the same cells in your body as histamine, and in doing so prevent histamine, and in doing so prevent histamine from attaching to these cells When there is a greater quantity of antihistamines prevent or minimise the itchiness, redness and discomfort caused by histamine. • Antihistamine drugs- Emedastine Epinastine Levacabastine Bepodastine.
- 5 MAST CELL INHIBITORS: Mast cell inhibiting medications stabilies celle in the eye known as mast cells, and in doing so prevent the release of histamine and other chemicals that cause the eyes to itch and swell. • These medications are used to prevent allergic eye reacton. • They do not provide immediate symptoms relief, usually taking 3-7 days to have an effect. • Mast cell inhibitors e.g- Sodium cromoglicate Nedocromil sodium Lodoxamide.

- **6. DUAL ACTION ANTIHISTAMINE AND MAST CELL STABILIZER:** Dual action antihistamine and mast cell stabilizers acts rapidly and are offen very effective for exacerbations. This drug prevents mast cells from opening up and releasing histamine and other chemicals that produce the symptoms of allergic conjunctivitis. They also prevent eosinophil, (cell also involed in inflammation, which contain a red dye called eosin and can stain themselves red) from infiltrating the eyes, thus reducing redness. This medication provides immediate symptom relief and can prevent recurrence of allergic eye symptoms. Drug Olopatadine Ketotifen Azelastine.
- **7 COMBINED PREPARATION:** Combined preaparation of an antihistamine and a vasoconstrictor e.g Antazoline with xylomethazoline.
- **8 NON-STEROIDAL ANTI-INFLAMMATORY PREAPARATION:** NSAIDS can provide symptomatic relief but are rarely used. NSAIDS do this by blocking enzymes involved in producing the chemicals that contribute to allergy and inflammation. Example Diclofenac.
- **9 TOPICAL STEROIDS:** Topical steroids are effective but rarely necessary. Example-Loteprednol Etabonate Fluromethalone.
- **10 ORAL ANTIHISTAMINES:** Oral antihistamines may be indicated for severe symptoms. Some, such as diphenhydramine, cause significant drowsiness and may be useful in aiding sleep.

#### General Treatment of Vataja Abhishyanda

Some of the Chikitsa described by Acharyas in the treatment of Vataja Abhishyanda are Snehana with Purana Sarpi, Snigdhaswedana, Siramokshana, Snaihikivirechana followed by Basti, Tarpana, Pu-tapaka, Ashchyotana, Nasya, Snehaparisheka And-shirobasti etc. Snehana Snehana should be done with Purana Sarpi Swedana This is administered with the poultice prepared from meat, Vesavara, Mahasneha, Yavachoorna and salt. This poultice is put over the forehead and cheek, etc. for Swedana. Swedana can also be done with steam of Aja Ksheera mixed along with Kwatha of Rasna, Dashamula, Bala, Kola, Kulattha and Yava.Nasya and Shirovirechana Nasya is to be administered with Kwatha prepared by milk with addition of Aushadhadravyas like Kasmar-ya, Madhuka, Kumuda, Utpala, Kustha, Brihati, Ta-malai, Sariva, Prapaundarika, Darbhamula and Kasheru.Nasya is also done with

Ghrita prepared by Kwatha of Ajaksheera and Aushadhadravyas like Rasna, Dashamula, Bala, Kola, Kulattha and Yava. Tila should be soaked in decoction of Bilva at night and dried during the day for 5 days. After that, oil should be extracted and mix it with fat of pig and cooked in milk with paste of Bilva and Madhuyashti. This Taila can also be used in Shirovirechana. Siramokshana or Raktamokshana In Vatajaabhishyanda, Raktamokshanais advised in order to eliminate the Doshas from Netrasrotas. So first Snehapana should be done with Ghrita and Tilvaka followed by Virechana and Basti and thenSiramokshana is to Acharyas advise Siravedhana to be done over the Lalata, Shankha and Upanasika. Seka This is done with the Kwatha prepared by Aanoopa-jalamamsa, with Kwatha prepared by Vata mitigat-ing drugs, with Vasa, Taila, Ghrita and Majja. [9] Kwatha prepared out of Kantakari Moola in Ajak-sheera, Kwatha made out of Moola and Twakof Eranda in Ajaksheera Kwatha prepared by Eranda, Brihati, Madhushigru and BrihatpanchmoolaTutha, Trikatu, Haritaki, Lodhra, Madhuyashti mixed in Kanji and kept in bronze vessel. These are some of the formulations that are described by Acharyas for per-forming Seka procedure in patients suffering from Vatajaabhishyanda. Vidalaka For this procedure in case of Vatajaabhishyanda, paste of Kustha, Pippali, Chandana and Utpala have been explained. Paste of Musta, Agaru and Chandana should be mixed with Madhu and used. [10] Paste of Saindhava, Agaru, Trijataka, Trikatu, Svarnagairika, Kustha and Tagara. Paste of Svarnagairika, Raktachandana, Daruharidra, and Vacha. Paste of Yashti, Gairika, Saindhava, Darvi, and Tarkshya, paste of Kumari and Chitraka, paste of Dadimapatra, paste of Vacha, Haridra and Nimbi, Paste of Saindhava, Shunthi, Lodhraharitakividalaka, Gairi-kadilepa and Bhoomyamalakilepa. [12] All these can be administered in patients of Vatajaabhishyanda. Anjana Pratyanjana prepared by Sphatika, Shankhanabhi, Madhuka and Gairika macerated in sugarcane juice, dried and made into pills should be used as Anjana. Curds kept in silver vessel, after it becomes blue, dried and prepared into pills can be used as Anjana. Anjana can also be done with Gutika prepared by Gairika, Saindhava, Krishna and Nagar macerated in water. Anjana is administered with Ghrita, kept in a copper vessel added with Saindhavalavana. Thin sheets of Naga heated red and immersed in decoction of Triphala and juices Bhringaraja, Shunthi, Ghrita, cow's urine, Madhu, Ajaksheera can be used for An-jana. Apamargaanjana and Anjana prepared by Brihatyadivarti, Haridradyavartican also be adminis-tered in Vatajaabhishyanda. Aschyotana In case of Vatajaabhishyanda, Aschyotanais to be administered with kwatha of Hriber, Tagar, Gunja-mool mixed with goat's milk. Kwatha of Erandmoola and leaves mixed with goat's milk, Kwa-tha of Shalparni, Prishnparni, Brihti, Madhuyashti mixed with goat's milk. Amlarasadiaschyotana, Rasanjanadi drava aschyotana, Karveer patra ras poorna and

Bilvadikwathaaschyotana etc. Tarpana The Ghrita prepared from addition of Kwatha of Kashmarya, Madhuk, Kumuda, Utpala, Kushtha, Brihati, Tamala, Mamsi, Sariva, Prapaundarika, Dar-bhamula, and Kasheru with milk and the milk mixed with the decoction of the head of black cobra should be boiled with Chandana, Ushira, Sarkara and Utpalakalkais to use for Tarpana in Vatajaabhishyanda. Putapaka In Vatajaabhishyanda, Putapaka prepared from Nimbapatra and Lodhra mixed with Jala should be administered. Pathya plays a very important role both in the man-agement and prevention of the diseases and even the same implies to Vatajaabhishyanda. Following Pathya and avoiding of Apathyaahara & Vihara is very essential, especially in diseased condition with or without the treatment. Ahara Sha-li, Regarding Pathyaahara, Shashtikashali, Purana Yava, Godhuma, Janglamamsarasa, Pato-la, Karavella, Kadali, Soorana, Divyambu, Lava Mamsa, Mayuramamsa, Vanakukutta mamsa are ad-vised by the Acharyas. Aushadha In Aushadhas, Purana Ghrita, Triphalaghrita, Patola, Shigru, Draksha, Lodhra, Karvella, Triphala, Punarnava, Kakamachi, Kumari, Chandana, Saindhava, Dadima, Vartaka, Karpura, Bhringaraja, Jivanti, Shatavari, Madhu etc. are said to be very effective in the management of Vatajaabhishyanda.

#### **CONCLUSION**

present study provides the complete comprehen-sion about the disease named Vataja abhishyanda, the Allergic conjunctivitis including its management in Ayurveda system and modern science, modern ophthalmology is very expensive and it should be followed lifelong and Ayurveda can provide better relief in such manifestation.

#### **REFERENCES**

- 1. Acharya Vaidya Jadavaji Trikamji., editor. Uttara Tantra. 4th edition. 5. Vol. 6. Varanasi: Chaukhamba Surbharati Prakashana; 2008. Sushruta, Sushruta Samhita; p. 603.
- 2. Sharma Shivaprasada., editor. Uttara Tantra. 56. Vol. 19. Varanasi: Chaukhamba Bharati Academy; 2006. Vriddha Vagbhata, Ashtanga Samgraha; p. 725.
- 3. Tripathi Bramhananda., editor. Uttara Tantra. 3-4. Vol. 15. Varanasi: Chaukhambha Sanskrita Pratishthana; 2007. Srimada Vagbhata, Ashtanaga Hridaya; p. 984.
- 4. Pandey Hari Prasada., editor. 7th edition. 116. Vol. 63. Varanasi: Chaukhambha Sanskrita Samsthana; 2000. Bhavamishra, Bhavaprakasha, Part 2; p. 645.

- Acharya Vaidya Jadavaji Trikamji., editor. Uttara Tantra. 4th edition. 6. Vol. 6. Varanasi: Chaukhamba Surbharati Prakashana; 2008. Sushruta, Sushruta Samhita; p. 603. [Google Scholar]
- 6. Khurana AK. Comprehensive ophthalmology. 4th ed. New Delhi: New Age International (P) limited; 2007. p. 73.
- 7. Alexander M, Berger W, Buchholz P, Wolt J, Burk C, Lee J, Arbuckle R. The reliability, validity and preliminary responsiveness of the Eye Allergy Patient Impact Questionnaire (EAPIQ) [Last accessed on 11 Jun 2011]; Health and Quality of Life Out comes. 2005 3:67.
- 8. Sushruta Samhita of Maharishi Sushruta: With English translation by K.L. Bhishagaratna Vol.-Ill; (1991), Chaukhambha Orientalia, Varanasi.
- 9. Sushruta Samhita of Maharishi Sushruta: With the Ni-bandh Samgrah commentary by Shri Dalhanacharya, edited by Vaidya Yadavaji Trikramji Acharya; (2003), Chaukhambha Surbharati Prakrashan, Varanasi.
- 10. Astanga Hridaya of Vagbhatta: Edited with the Vidyo-tinihindi Commentary by Kaviraj Atridev Gupta.
- 11. Astanga Samgraha of Acharya Vagbhatta: By Kaviraj Atridev Gupta, Vidyalankar, Bhishagratna.
- 12. Sarangadhara Samhita of Pt. Sharangdharacharya: With commentary by Dr. Brahmanand Tripathi; (2004), Chaukhambha Surbharati Prakashan, Varanasi.