IAMJ

INTERNATIONAL
AYURVEDIC
MEDICAL JOURNAL

Review Article | ISSN: 2320 5091 | Impact Factor: 5.344

PATHOLOGICAL CONDITIONS OF PHARYNX (KANTHA) - A REVIEW STUDY

Avani M. Kamble[1], Shivani O. Gupta[2]

[1]P.G. Roganidana. (Sch.), [2]P.G. Guide,
Department of Roganidana, Y.M.T Ayurvedic Medical College and Hospital, Kharghar,
Navi Mumbai, Maharashtra, India

Email: avanikamble4@gmail.com

https://doi.org/10.46607/iamj08062020

(Published online: June 2020)

Open Access

Article Received: 30/05/2020 - **Peer Reviewed:** 05/06/2020 - **Accepted for Publication:** 08/06/2020

Check for updates

ABSTRACT

Objective – The objective of this review study is to enumerate pathological conditions at pharynx according to modern medicine and Ayurveda. **Background** -Pharynx, according to modern medicine is divided as naso pharynx, oro pharynx and laryngo pharynx or hypo pharynx. Inflammation of pharynx causes dysphagia that is difficulty in swallowing. This inflammation is not just limited to pharynx but also observed at tonsils, uvula, para pharyngeal spaces and retro pharyngeal spaces. The clinical examination of inflamed pharynx locally reveals formation of pseudo membrane. Depending upon the causative agent the color of throat and patches of exudates or fungi are observed and other systemic signs and symptoms are seen as per underlying disease. Pharyngitis could be an indication of both, lower and upper respiratory tract infections. Along with dysphagia, fever, headache, hoarseness of voice, itching and frequent thirst are experienced by patients. Sometimes loss of appetite, diarrhea is also observed. Considering Ayurvedic aspect of pharynx it is named as *Gala* or *Kantha* meaning throat. *Gala* is a part of *Pranvahasrotasa* and *Annavahasrotasa*. Any *Dosha Dhatu Dushti* locally or remotely, which causes discomfort at *Kantha* and *Gala parshwa* is broadly classified under *Kanthagata Roga*. The general symptoms in *Gala Roga* are *Gala Shoola, Gala Shotha, Gilan Kashtata, Swarbheda and Trishna*. Involvement of *Marma* makes it untreatable or *Asadhya Vyadhi*. **Conclusion** - Pharyngitis of any reason could prove to be fatal if overlooked for longer duration.

Keywords: Pharyngitis, *Kanthagataroga, Sankramakaroga.*

INTRODUCTION

Incidence of pharyngitis is a quite common scenario in developing countries. It is very much dependent on socio economic residence difference, humid weather, immunity and population. Studies show pharyngitis is viral, bacterial or could be fungal. Pharyngitis is an inflammatory disorder of pharynx may be acute but with multiple episodes. When associated with acute infections there would be no dyspnoea, wheezing, rales or crepits on chest auscultation. Pharyngitis is chronically observed in carcinoma arising due to nicotine intake for long term, or ingestion of corrosive substances. General Symptoms of throat disease are pain, ulceration, strider or stertorous (noisy) breathing, dysphonia (hoarseness), dysphagia (difficulty in swallowing), a mass in the neck.[1] On going through the classical texts and subtle description of *Kanthagatarogas Ekvrinda* and *Vrinda* are more compatible with pharyngitis while visualizing on the ground of clinical features.[2] . According to *Acharya Sushruta* seventeen *Vyadhi* are classified under *Kanthagata Roga* whereas *Acharya Vagbhatta* has described eighteen. This classification is based on site and shape of *Shotha* observed in *Vyadhi*. Clinically though pharyngitis is minute disease with not much of morbidity prevalence when only limited to pharynx acutely. But has squeal in terms of suppurative complications seen with GAS pharyngitis include tonsillopharyngeal cellulitis or abscess, otitis media, sinusitis, necrotizing fasciitis, bacteraemia, meningitis, brain abscess, and jugular vein septic thrombophlebitis. Non-suppurative complications of GAS pharyngitis include acute rheumatic fever, post-streptococcal reactive arthritis, scarlet fever, streptococcal toxic shock syndrome, acute glomerulonephritis, and paediatric autoimmune neuropsychiatric disorder associated with group A streptococci. [5] Causative agent of pharyngitis with exudates is diagnosed by throat culture. Though throat culture is not a frequent investigation asked in general practice but could prove to be useful for avoiding irrational use of antibiotics prescribed. Centor Criteria is useful for identifying bacterial pharyngitis. One clinical tool for prediction of GAS pharyngitis is the Centor criteria, a model of positive cultures consisting of four variables (tonsillar exudates, swollen tender anterior cervical nodes, lack of cough, and a history of fever). [4]

Material and Methods

A review of, *Laghutrayi* and *Bruhattrayi* along with review articles.

Search words used, *Pranvaha Srotasa, Pharynx, Pharyngitis, Tundikeri, Nasocomial, Shwasa, Gala Roga, Kantharoga, Udanvayu, Larynx, Gilayu, Pratishyay, Rohini, Ekvrunda, Shataghni, Galaugha,* hypersensitivities, inflammation of epiglottis, uvulitis, epidemiology, global burden of disease, mortality and morbidity.

Result

Anatomically pharynx is the part of throat behind the mouth and nasal cavity. Hence it is a common passage of respiratory system and digestive system. Further it continues and goes down to esophagus of digestive and larynx of respiratory system. Hence it is a site of infection as it is connected to nasal and buccal opening. (Figure 1)[7]

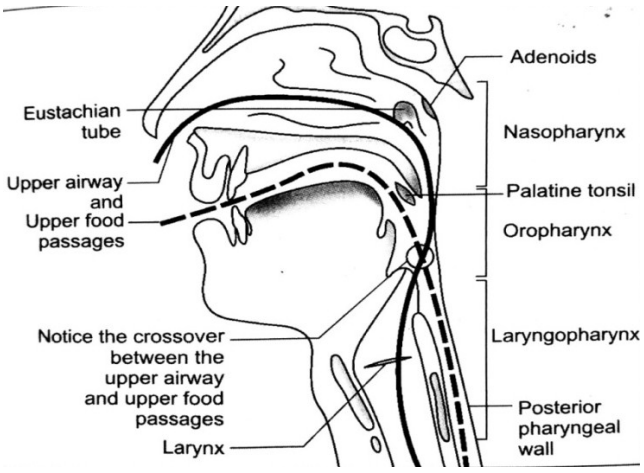

Figure1. Anatomy of Pharynx.

Pharyngitis is inflammation of membrane type of infectious disease.It can be viral or bacterial, bacteria

being streptococcal. In chronic stage it is later, hypertrophic and atrophic.

Following are few of the causative agents of pharyngitis. Viral infections include –

Adenovirus- Adenovirus infection presents lymph node enlargement, but no erythema yet painful. It is a self-limiting disease and prevalent in immune-compromised children or adults. There is no vaccine available for it. Transmission of adenovirus can occur by aerosol droplets, fecal–oral transmission, and contaminated fomites. [8]

Epstein-Barr virus – Clinically presenting pharyngitis along with infectious mononucleosis, lymph nodes swelling with exudative tonsillitis, redness and swelling. It infects at least 90% of the population worldwide, the majority of whom have no recognizable illness. [9]

Herpes Simplex virus –Painful, shallow ulcers with red borders or vesicles on the soft palate, gums, lips, or buccal surface help distinguish herpes simplex from other causes. Fever and lymphadenopathy are frequent.[10]

Para-myxoviridae - Measles with peripheral eruptions. It is found in paediatric age group. Vaccination is available for Measles, yet the infection can occur with symptoms of fever, sore throat, boils or eruptions over skin.[11]

Rhinovirus- Common symptoms include rhino rhea, nasal congestion, sore throat, cough, headache, subjective fevers, and malaise. Two studies detected HRV in 0% and 2% of asymptomatic adults, although rates were higher in adult household members of HRV-infected children.[12]

Corona virus- The symptoms are usually fever, cough, sore throat, breathlessness, fatigue, malaise among others. The disease is mild in most people; in some (usually the elderly and those with co-morbidities), it may progress to pneumonia, acute respiratory distress syndrome (ARDS) and multi organ dysfunction. [13]

Respiratory Syncytial Virus- It affects younger age group. Infants present with constant clear rhino rhea, cough, sneezing, and fever, shortness of breath, wheezing, pharyngitis or respiratory distress. Cough and wheezing occur in 50% of infected children. [14]

Para-influenza virus- Para-influenza viruses are associated with both upper and lower respiratory tract disease in children and adults, and the spectrum of illness typically includes otitis media, pharyngitis, conjunctivitis, croup, tracheobronchitis, and pneumonia. Uncommon respiratory manifestations include apnea, bradycardia, parotitis, and respiratory distress syndrome.[15]

Bacterial causes –

Group Streptococcus pyogenes – It is observed in all age groups. Group A Streptococcus is the most common bacterial etiology of acute pharyngitis, only 30% of the children and 10% of the adults with sore throat are infected by GAS. Moreover, GAS pharyngitis is the only acute pharyngitis for which antibiotic therapy is definitely indicated, as it could prevent rheumatic fever, shorten the period of fever, toxicity and infection, and minimize local complications such as peritonsillar abscess, mastoiditis and sinusitis. [5]

Fusobacterium necrophorum - The classical presentation of invasive *F. necrophorum* infections includes the presence of a sore throat followed by a high fever and rigors, and is accompanied by cervical lymphadenopathy and generally occurs in previously healthy adolescent males[16]

Diphtheria is an acute communicable disease caused by Corynebacterium diphtheria. It usually occurs in children and results information of yellowish grey pseudo membrane in the mucosa of nasopharynx, oropharynx, tonsils, larynx and trachea. Corynebacterium diphtheria elaborates and exotoxins that cause necrosis of the epithelium which is associated with abundant fibrinopurulent exudates resulting in the formation of pseudo membrane. Absorption of the exotoxins in the blood may lead to more distant injurious effects such as myocardial necrosis, polyneuritis, and parenchymal necrosis of the liver, kidney and adrenal.[17]

Other underlying conditions where pharyngitis is presenting symptom are as follows:

Submandibular space infections like Ludwig's angina and epiglottitis. This is a serious, acute streptococcal cellulitis involving the neck, tongue and back of the throat. The condition was more common in pre antibi-

otic error as a complication of compound fracture of the mandible and periapical infection of the Molars. The condition often approves fatal due to glottic oedema, asphyxia and severe toxemia.[17]

Vincent's angina -Vincent's angina is a painful condition of throat characterized by local ulceration of the tonsils, mouth and pharynx. The causative organism is Vincent's bacillus. The condition may occur as an acute illness involving the tissues diffusely or as a chronic form consisting of ulceration of the tonsils.[17]

Advanced pattern infections, like Parapharyngeal space infections for peritonsillar abscess. Peritonsillar abscess or Quincy occurs as a complication of acute tonsillitis. The causative organisms are staphylococcus or streptococcus which is associated with infection of the tonsils. The patient complains of acute pain in the throat, trismus, difficulty in speech and inability to swallow. The glands behind the angle of mandible are enlarged and tender. Besides the surgical management of the abscess, the patient is advised tonsillectomy because Quincy is frequently recurrent. [17]

In Fungal infections it presents oral thrush of *Candida albicans*.[18]

Noninfectious cause of pharyngitis is seen in case of frequent of acid reflux.

Tumours involving Pharynx

Nasopharyngeal angiofibroma

This is a peculiar tumour that occurs exclusively in adolescent males (10 to 20) years of age suggesting the role of testosterone hormone in its production. Though a benign tumor of the nasopharynx it may grow into para nasal sinuses, cheek and orbit but does not metastasize. [19]

Nasopharyngeal carcinoma.

Nasopharyngeal carcinoma is a common cancer in Southeast Asia, especially prevalent in people of Chinese descent under 45 years of age. Genetic susceptibility and role of Epstein -Barr virus is considered important factors in its etiology. In fact, EBV genome is found virtually in all cases of nasopharyngeal carcinoma. The primary tumor is generally small and undetected, while the metastatic deposits in the cervical lymph nodes may be large. [19]

Embroynal rhabdomyosarcoma.

Also termed as botyroid rhabdomyosarcoma, this is one of the common malignant tumors in children but can also occur in adults. The legend is highly cellular and mitotically active. Other locations include vagina, orbit, middle ear, oral cavity, retroperitoneum and bile duct. [19]

Malignant lymphoma.

The lymphoid tissue of the nasopharynx and tonsils may be the site of development of malignant lymphomas, which resemble similar tumours elsewhere in the body. [19]

As per *Ayurvedic* literature, pharynx is a part of *Kantha or Gala*. According to *Acharya Sushruta, Agni, Soma, Vayu, Satva, Raja, Tama* and *Panchendriya,* the *Vahan* for transfer or conduction of transfer through all the structures of body is called *Pranvaha srotasa*. [20]*Acharya Chakrapani* indicates respiratory system should be considered as *pranvaha srotasa*. In *Charak Samhita* it is stated as GIT or *Mahasrotasa*, it is a principal organ or *Moola* of system. It is clinically observed that, when heart and GIT is disturbed respiratory symptom appears without fail. [21]Due to throat infections as the QALY i.e., the quality-adjusted life year (QALY) gained might vary depending on the particular health outcome considered parents strongly prefer to prevent GAS disease in children compared to vaccine adverse events.[22]

From *Charak Samhita and Sushruta Samhita*, *Tika* and review articles, it is observed that *Pranvaha* and *Annavahasrotasa* are duly dependent. Course of *Prana Vayu* is descending and so is that of diet taken. Any *Vaishamya* in diet and dietary habits causes *Vikrut Gati* of *Prana Vayu, Pitta* and *Kledaka Kapha at Aamashay* causing a disease. Due to this *Pratilom Gati* of *Prana* and *Udana* starts the relay of *Samprapti* and ultimately *Urdhwagata Roga*. Hence respiratory dysfunctions are seen. Pharynx is common passage of *Annavaha* and *Pranvaha Srotasa*. As per *Dosha* vitiation and *Khavaigunya, Samprapti* is followed and eventually disease is seated in the site.

Galagata or *Kanthagata Roga* [23] [24] [25] [26] [27] as per Ayurvedic texts are as follows

Rohini – According to *Acharya Sushruta Vataja, Pittaja, Kaphaja, Sannipataja* and *Raktaja.* According to Acharya *Sharangdhara Vataja, Pittaja, Kaphaja, Sannipataja, Medoja* and *Raktaja.* According to *Vagbhatta, Vataja, Pittaja, Kaphaja* and *Sannipataja*.

Vataja Rohini- Clinically presenting *Mansankuras, Kantha* and *Mukha-Shushkata* and *Hanu* and *Karna Vedna*. According to *Madhukosha* it also presents *Kampa, Vinaama, and Sthambha*. It is described as *Ashukari* as it may cause death if untreated within 7 days.

Pittaja Rohini – Clinically presents *Tivra Jwara, Daha* and *Shighrapaka*. *Mansankura* spreads quickly, Along with *Vedna, Lali, Sparshasahtwa, Osha, Trishna, Moha* and *Kanthadhumayana*. According to *Acharya Bhoja* if it remains untreated could cause death in 4 days whereas according to *Acharya Yogaratnakara* it could cause death in 5 days.

Kaphaja Rohini- It presents *Mansankuras* of *Guru, Sthira, Pichila* and *Shweta Varna.* These are *Mandpaki*. They cause *Avrodha* (obstruction) of *Shwasamarga.* According to *Acharya Bhoja* it may cause death if untreated for 3 days or more.

Raktaja Rohini – It clinically manifests *Srotasa* of reddish or blackish discoloration, has *Vedna*, and has *Lakshanas* of *Pittaja Rohini*.

Medoja Rohini – This type is only described by *Acharya Sharangdhara*. But it's *Lakshanas* and *Chikitsa* is undefined.

Sannipatik Rohini- It is clinically presented by formation of *Gambhirpaki Mansankuras* which are *Dhatugata* and is *Asadhya* (untreatable) and presents *Lakshanas* from all *Doshas*.

Kanthashalook- According to *Acharya Sushruta* it is *Kaphaja* but according to *Vagbhatta* its *Kaphapradhan* presenting *Shotha* or *Granthi* of *Grathit* and *Sthira* type causing obstruction of *Shwasamarga* (airway). The pain is compared to that of thorn prick hence the name *Kanthashalook.* According to *Acharya Sushruta* it is *Shastrasadhya (surgical removal).* According to *Acharya Vagbhatta* it is *Sadhya. I*t has no *Upa-prakaras* and the *Mansankuras* resemble *Kamal Kanda.*

Adhijiwha – It is a *Kaphapradhan Raktaanubandhi Vyadhi* seated at *Jiwha Moola* and *Jiwhaagra.* According to *Acharya Sushruta* it is *Sadhya* in *Aamavastha* and *Asadhya* in *Pakwaawastha.*

Valaya- According to *Acharya Sushruta* and *Dalhana* it is *Kaphapradhan* with *Vistrutapatkar, Unnata* and *Alpa Shothayukta Shotha.* According to *Acharya Vagbhatta* it has *Alpa Vedna.* It is an *Asadhya Vyadhi.*

Swaraghna or Swarha – It is been described by *Acharya Sushruta, Dalhana* and *Vagbhatta* as vitiation of *Kapha* causing *Avrodha* in *Shwasamarga* (airway obstruction) causing *Timirdarshana* (syncope or fainting) in case of *Vata* vitiation it causes *Shushkata* and *Shaithilya* at *Kantha* resulting into *Bhinnaswara* or *Swarbheda.* It is an *Asadhya Vyadhi.*

Balasa – According to *Acharya Sushruta,* vitiation of *Kapha* and *Vata* causes *Shwasakruchrata* (dyspnoea) in *Kantha* eventually leading to *Vikruti* at *Hrudayadi Marma.* Involvement of *Marma* makes it *Asadhya.*

Vrunda- According to *Acharya Sushruta* and *Vagbhatta* vitiation of *Pitta Rakta* at *Gala Parshwa formation* of *Unnata, Gola* and *Tivra Vedna Shotha* is observed. In case of *Vedna* it also has vitiation of *Vata.* It is a *Sadhya Vyadhi* as per *Acharya Vagbhatta* and *Asadhya* as per *Acharya Sushruta.*

EkVrunda – According to *Acharya Sushruta* vitiation of *Kapha Rakta* at *Kantha* causes formation of *Shotha* of *Unnata, Gola, Kathina, Paki* or *alpapaki* with *Kandu.* It is a *Sadhya Vyadhi.*

Tundikeri –This is been only described by *Acharya Vagbhatta* as *Kaphaja Vyadhi* of *Sadhya type.* Due to vitiation of *Kapha* formation of *Shotha* is observed at *Hanu* of *Karpasiphalsannibh* (cotton seed shaped), *Pichila* and *Kathina* and *Mandvedna lakshanas.*

Shataghni – According to both *Acharya Vagbhatta* and *Sushruta Shataghni* in *Tridoshaja Vyadhi* of *Asadhya type* where in *Shataghni* located at *Gala* forms a *Ghana(dense), Mansankuras* and *Unnata (elevated) Shotha* which again obstructs the airway causing *Trishna, Jwara* and *Shirashoola. Shataghni* is an artillery weapon which is destructive and so is the disease; hence it is coined as *Shataghni.*

Gilayu- As described by *Acharya Vagbhatta* it presents *Mansankuras* of *Pruthu Moola* (large pedicle)

and *Sakashta Uchwasa* and difficulty in swallowing food. It is a *Tridoshaja Vyadhi* and *Aushadhi Sadhya. Acharya Sushruta* differs as describing it as *Amalasthimatra (Amala* seed sized*) Granthi, Sthira, Alpa Vedna.* It causes *Sataktamivashanam*(obstruction of food). It presents due to vitiation of *Kapha* and *Rakta.* It can be treated by *Chedana or Bhedhana* (surgical removal).

Gala Vidradhi – Acharya Sushruta, Dalhana and *Vagbhatta* have described *Gala Vidradhi* as *Asadhya Vyadhi* presenting *Puyasadrush, Tivra Vednayukta* and *Tridoshaja Vyadhi.* In case of *Pakotpatti* and other symptoms it eventually becomes *Sannipatik Vidradhi.*

Galaugha – According to *Acharya Sushruta* it is *Kapha-Raktaja Vyadhi* with *Aantbahya Dushti* causing *Shotha.* According to *Madhukosha,* it also presents *Jwara, Shirogaurav, Tandra* and *Lalasrava* and causes *Udana Vayu Dushti*. It is an *Asadhya Vyadhi.*

Swaraghna – Kapholipta at *Kantha* resulting into *Maargaavrodh.*

Maansataana- This *Vyadhi* is described by *Acharya Sushruta* as, vitiation of all three *Doshas* causing *Shotha* which gradually increases in size, causing obstruction and hence fatal.

Vidaari – According to *Acharya Sushruta* it is caused due to vitiation of *Pitta* at *Kantha* causing *Shotha* with *Daha, Toda* and *Aaraktavarnata.* It may cause *Paka* and cause *Mansa Darana* or *ulceration* with foul odour. It is *Asadhya.*

Galarbuda – According to *Acharya Vagbhatta* it is seated at the junction between *Jiwha* and *Kantha,* presenting *Shotha* of *Sthira, Lalavarna,* without any *Vedana* and *Apaki type.* It is a *Tridoshaja Vyadhi* and is *Asadhya.*

Galaganda- Acharya Vagbhatta has described it as vitiation of *Vata, Kapha* and *Meda* causing formation of small and large sized, *Mushak vallamb at* (bilobed shape of scrotum) *Shotha* limited to outer side.

Vataja Galaganda - According to *Acharya Sushruta* and *Vagbhatta* it is described as *Gala Shotha* of *Aaraktavarnata* and *Krushna Sira*, along with *Toda*. It gradually increases in size and does not form *Paka*. If *Pakottapatti* develops, it causes *Aruchi* and *Talu* and *Gala Shosha*. It is *Sadhya* type of *Vyadhi*.

Kaphaja Galaganda– It is described by *Acharya Sushruta* and *Vagbhatta*, where in vitiation of *Kapha* causes *Sthira, Twakvarni, Shitasparshi* and *Manda Vedna Yukta Shotha.* It also shows *lakshanas* of *Kandu*, increases in size and rarely *Paka* is seen. Due to vitiation of *Kapha* it causes *Mukhavirasta* and *Kapholiptata* at *Mukha* and *Kantha*. It is a *Sadhya* type of *Vyadhi*.

Medoja Galaganda - According to *Acharya Sushruta* and *Vagbhatta Medoja Galaganda* is *Snigdha, Mrudu, Pandurvarni* and *Durgandhi Yukta, Kandu Yukta* without any *Vedna*. It has a small sized *Moola* (pedicle) and hangs in *Kantha* like an *Alabu.* It presents *Snigdhayasyata* at mouth and hence causes noisy respiration and *Aspshta Swara*. It also shows lakshanas of *Kaphaja Galaganda*. It is *Sadhya* until one year of occurrence.

Asadhya Galaganda- A person who has *Kruchraachavasantama* (airway obstruction or dyspnoea), *Mrudusarva Gatranama*, a year-old symptom, *Aruchi, Kshina*, *Bhinna Swara* (hoarseness) is considered to be untreatable as described by *Yogaratnakara*.

Importance of quick treatment in *Kanthagata Roga*.

According to *Acharya Vagbhatta, Kantharoga* are seated in the passage or route of *Prana vayu*. Due *Pramada* if any such disease neglected, would cause obstruction in *Shwasamarga* and cause obstruction or constriction on esophageal walls. Hence in case of *Kantha roga*, a quick treatment approach is important. [28]

As recent pandemic, Covid -19 is a viral infection of respiratory tract. The causative agent is SARS-CoV-2. The pandemic originated in Wuhan, China in the year 2019. The novel CoV can be transmitted between humans via respiratory droplets. At the onset of the disease, the main manifestations of COVID-19 are fatigue, fever, dry cough, myalgia and dyspnoea, with less common symptoms being nasal congestion, headache, runny nose, sore throat, vomiting and diarrhoea. Severe patients often have dyspnoea and/or hypoxemia 1 week after onset, after which septic shock,

ARDS, difficult-to-correct metabolic acidosis, and coagulation dysfunction develop rapidly. Of note, severe and critical patients can also only present with a low fever, or even no obvious fever, and mild patients show only low fever, mild fatigue and no pneumonia. Clinically it manifested symptoms of pulmonary Pneumonia. A recent study showed that the enteric symptoms of COVID-19 pneumonia are associated with invaded ACE2-expressing enterocytes. [29]

DISCUSSION

According to modern medicine, pharyngitis is viral, bacterial, fungal or complication of some local infections. Though self-limiting it has various sequale. Pharyngitis is a common clinical manifestation observed in viral, fungal and bacterial infections according to modern medicine. Erythema, exudation, white patches, dysphagia, hoarseness of voice are signs associated with it. Apart from infections pharynx, is common site for carcinoma. Pharyngeal cancer clinical features are lump for sore throat that does not heal, sore throat that goes away, dysphagia and change in voice, unusual bleeding, facial swelling or trouble in breathing. Pharynx or *Gala* is *Sanchara Sthana* of *Prana* in *Urdhwa Jatrugata* region and thus plays vital role in passage of food and air, taste, sensation, deglutition. Also, it is a site of Waldeyer's ring situated at naso pharynx which is a rich source of IgG, IgM, and IgA and works a defense mechanism. Course of *Prana Vayu* is descending and so is that of diet taken. Any *Vaishamya* in diet and dietary habits causes *Vikrut Gati* of *Prana Vayu, Pitta* and *Kledaka Kapha* at *Aamashay* causing a disease. Due to this *Pratiloma Gati* of *Prana* and *Udana*, a relay of *Samprapti* starts and ultimately *Urdhwagata roga*. Hence respiratory (*Shwasoshwas*) dysfunctions are seen.

CONCLUSION

It can be concluded that as per modern medicine, any contagious disease causing upper respiratory tract infection manifests pharyngitis as general symptom in acute phase. Pharyngitis when associated with lower respiratory tract infections like tuberculosis or pneumonia would present wheezing, dyspnoea, stridors, crepits or rales as per lung tissue involvement. It lies common in infants, children, and adult and geriatric age group. Depending upon the causative agent, its incubation and symptomatic duration, involvement of surrounding tissues or organs and multiple episodes may vary.

As pharyngitis is so commonly observed in society it is very much important to find its cause and further stop the spread of infective agent through aerosols or droplet nuclei. As many of the viral infections, out of which few are rarest, have no specific vaccine available, only symptomatic treatment is given. Hence personal hygiene, social distancing, hand sanitization and coughing and sneezing etiquettes should be followed by an individual. *Prasangata, Gatra Sansparshata, Nishwasata, Sahbhojanata, Saha Shayanata, Vastra, Mala-Anulepanata as described as hetu in Sankramaka* disease, which can be avoided to prevent spread of viral, fungal or bacterial pharyngitis.

Coming to ayurvedic point of view, *Gala Roga* are described to be caused by *Dosha* and *Dhatu Dushti*. Hence *Nidana Parivarjana* should be followed. *Kanth* is one of the *Marma*, and *Marmaghata* is cause of death or *Vaikalya*. *Prana* and *Udana Gati Dushti* cause frequent *Kasotpatti, Gala, Shotha* and eventually *Swarbheda.* So *Gati* of all *Doshas* should be maintained by following *Dincharya, Ritucharya* and *Ahara Vidhi Visheshayatanas*.

REFERENCES

1. Glynn. M, Drake. W, Chapter 20, Ear Nose and throat, Hutchinsons Clinical Methods, Edition 23rd, Elsevier,2012, P 432.
2. Bhardwaj. V. & Gupta. S., Effect Of An Ayurvedic Formulation In The Managemen tOf Pharyngitis, IAMJ, 2017,5(7)
3. Ambikadatt Shastri, Sushruta Samhita Of Sushruta With Ayurveda Tatva Sandipika Hindi Commentary, Nidanasthana, Reprint Edition; 2013, Chapter 16 Versus 4, Varanasi: Chaukhambha Sanskrit Sansthana, 2010, P. 382
4. Dr.Ganesh Krushna Garde, SaarthVaghbhataUttarsthana, Reprint 2009, Chapter 21 Versus 64.ChaukhambaSubhartiPrakashan,Varanasi,P415
5. Ashurst JV, Edgerley-Gibb L. Streptococcal Pharyngitis. [Updated 2019 Nov 25]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing;

6. Chazan B, Shaabi M, Bishara E, Colodner R, Raz R. Clinical predictors of streptococcal pharyngitis in adults. Isr Med Assoc J. 2003 Jun;5(6):413-5. PMID: 12841012.
7. Chaurasia. B. D, Mouth and Pharynx, chapter 14, C B S Publishers and distributors, New – Delhi, 2010.page - 213.
8. Khanal S, Ghimire P, Dhamoon AS. The Repertoire of Adenovirus in Human Disease: The Innocuous to the Deadly. Biomedicines. 2018 Mar 7;6(1):30. doi: 10.3390/biomedicines6010030. PMID: 29518985; PMCID: PMC5874687.
9. Shrivastava SR, Shrivastava PS, Ramasamy J. Measles in India: Challenges & recent developments. Infect Ecol Epidemiol. 2015 May 25; 5:27784. doi: 10.3402/iee.v5.27784. PMID: 26015306; PMCID: PMC4444763.
10. Middleton DB. Pharyngitis. Prim Care. 1996 Dec;23(4):719-39. doi: 10.1016/s0095-4543(05)70359-6. PMID: 8890141; PMCID: PMC7125999.
11. Balfour HH Jr, Dunmire SK, Hogquist KA. Infectious mononucleosis. Clin Transl Immunology. 2015 Feb 27;4(2):e33. doi: 10.1038/cti.2015.1. PMID: 25774295; PMCID: PMC4346501.
12. Jacobs SE, Lamson DM, St George K, Walsh TJ. Human rhinoviruses. Clin Microbiol Rev. 2013 Jan;26(1):135-62. doi: 10.1128/CMR.00077-12. PMID: 23297263; PMCID: PMC3553670.
13. Singhal T. A Review of Coronavirus Disease-2019 (COVID-19). Indian J Pediatr. 2020 Apr;87(4):281-286. doi: 10.1007/s12098-020-03263-6. Epub 2020 Mar 13. PMID: 32166607; PMCID: PMC7090728.
14. Eiland LS. Respiratory syncytial virus: diagnosis, treatment and prevention. J Pediatr Pharmacol Ther. 2009 Apr;14(2):75-85. doi: 10.5863/1551-6776-14.2.75. PMID: 23055894; PMCID: PMC3461981.
15. Branche AR, Falsey AR. Parainfluenza Virus Infection. Semin Respir Crit Care Med. 2016 Aug;37(4):538-54. doi: 10.1055/s-0036-1584798. Epub 2016 Aug 3. PMID: 27486735; PMCID: PMC7171724.
16. Van TT, Cox LM, Cox ME, Dien Bard J. Prevalence of Fusobacterium necrophorum in Children Presenting with Pharyngitis. J Clin Microbiol. 2017 Apr; 55(4):1147-1153. doi: 10.1128/JCM.02174-16. Epub 2017 Jan 25. PMID: 28122872; PMCID: PMC5377842.
17. Mohan. H, Chapter 18, The Eye, ENT and Neck, Textbook of Pathology, Edition 6th, New Delhi, Jaypee brothers Medical Publishers,2010, Textbook of Pathology p 517-518.
18. Glynn. M, Drake. W., Chapter 20, Ear Nose and throat, Hutchinsons Clinical Methods, Edition 23rd, Elsevier,2012, P 433.
19. Mohan. H, Chapter 18, The Eye, ENT and Neck, Textbook of Pathology, Edition 6th, New Delhi, Jaypee brothers Medical Publishers, 2010, Textbook of Pathology p 518-519.
20. Budruk. A, Conceptual Study of Pranavaha Strotas with Reference to Modern Anatomy. IAMJ, Volume 4; Issue 04; March- 2016.
21. Bhawsar. P & Nampalliwar. A, Moolasthana Of PranavahaSrotas: A Review. IAMJ, Volume 6, Issue 8, August 2018.
22. Lee GM, Salomon JA, Gay C, Hammitt JK. Preferences for health outcomes associated with Group A Streptococcal disease and vaccination. Health Qual Life Outcomes. 2010 Mar 12; 8:28. doi: 10.1186/1477-7525-8-28. PMID: 20226042; PMCID: PMC2848145.
23. Ambikadatt Shastri, Sushruta Samhita Of Sushruta With Ayurveda Tatva Sandipika Hindi Commentary, Nidanasthana, Reprint Edition; 2013, Chapter 16 Versus 48-63, Varanasi: Chaukhambha Sanskrit Sansthana, 2010, P. 388-391
24. Dr.Ganesh Krushna Garde, Saarth VaghbhataUttarsthana, Reprint 2009, Chapter 21 Versus 41-57.Chaukhamba Subharti Prakashan, Varanasi, P 411-415
25. Ambikadatt Shastri, Sushruta Samhita Of Sushruta With Ayurveda TatvaSandipika Hindi Commentary, ChikitsaSthan, Reprint Edition; 2013, Chapter 22 Versus 63-65, Varanasi: Chaukhambha Sanskrit Sansthana, 2010, P. 388.
26. Vaidya Lakshmipati Shastri, Yogaratnakara With Vidyodini Hindi Commentary, Galroga, Versus Reprint Edition; 2013, Chaukhambha Prakashan, P293-295.
27. Ambikadatt Shastri, Sushruta Samhita Of Sushruta With Ayurveda TatvaSandipika Hindi Commentary, Nidanasthana, Reprint Edition; 2013, Chapter 11 Versus 23-27, Varanasi: Chaukhambha Sanskrit Sansthana, 2010, P. 388.
28. Dr.Ganesh Krushna Garde, Saarth Vaghbhata Uttarsthana, Reprint 2009,Chapter 22 Versus 111,Chaukhamba Subharti Prakashan, Varanasi, P 422
29. Li H, Liu SM, Yu XH, Tang SL, Tang CK. Coronavirus disease 2019 (COVID-19): current status and future perspectives. Int J Antimicrob Agents. 2020 Mar 29;55(5):105951. doi: 10.1016/j.ijantimicag.2020.105951. Epub ahead of print. PMID: 32234466; PMCID: PMC71392s47.

Source of Support: Nil
Conflict of Interest: None Declared

How to cite this URL: Avani M. Kamble, Shivani O. Gupta et al: Pathological Conditions Of Pharynx (Kantha) - A Review Study. International Ayurvedic Medical Journal {online} 2020 {cited June, 2020} Available from: http://www.iamj.in/posts/images/upload/3768_3775.pdf

doi: 10.46607/iamj.08062020 | IAMJ June 2020 | www.iamj.in