WORLD JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.wjpmr.com

Review Article ISSN 2455-3301 WJPMR

A CRITICAL REVIEW ON MUKHA PAKA W.S.R TO STOMATITIS

Vd. Pravin Patil*, Vd. Nagesh Jaiswal and Vd. Amit Badbhuche

India.



*Corresponding Author: Vd. Pravin Patil India.

Article Received on 17/07/2024

Article Revised on 07/08/2024

Article Accepted on 27/08/2024

INTRODUCTION

The aim of medical science is to provide better health to every child so as to have a nice tomorrow, different medical sciences with various principles and fundamentals are trying their best for one common goal, i.e. health for all. To achieve this goal, the branch should be able to eliminate the disease and that to be without any side effects. Kaumarbhritya has been considered as an important speciality in Ayurveda, various terms have been used for this during the ancient period, kaumarbharityakam (Charak), Kaumarbhritya, Kaumarbhrityatantra (Sushruta and kashyapa). Bala-chikista (vagbhat and Harita). The word Kaumarbhritya is composed of two words kaumara and Bhritya. The word "Kumara" was used in vedas, in the sense of child, boy, youth, son etc. The word kumara is combination of two words "ku and mara'. The word ku is used as prefix, implying deterioration, depreciation or deficiency. The word mara is derived from root. e. Acharya Charak mentioned only the name of Kaumarbhritya in 6th place in Astangs. Chakrapani has defined the subject and said that Bharana of Kumara is the main area of Kaumarbhritya. Mukhapak in children is prevalent all over the world. It refers to an oral disease which occurs in two ways former on occures independently (swantantrarogam) & latter occurs in association with (anubandhrogam) other diseases like Grahani. It occurs due to vit B12 deficiency, folate deficiency, leukemia, inflammatory bowel disease, stress, illness, and dietary triggers. Nutritional deficiency with Mukhapak is found in those with poor oral hygiene. In mukhapakvata is moving throughout the interior of mouth gives rise to ulcers. which shift in different place of oral cavity. Dry makes lips coppery red. Tongue become intolerant to cold, feels heavy, cracked and feels as though full of thrones there is difficult to open the mouth i.e. mukhapak.

Ayurvedic concept

There are 64 types of Mukharoga mentioned by Acharya Charak, while Acharya Sushruta, AcharyaBhoja and Madhav Nidana have mentioned 65 types of Mukharogas. Acharya Vagbhata has mentioned 67 types of Mukharogas. Mukhapaka is one of the mukharoga and occurs in all over the oral cavity Acharya Kashyapa, Charak has described it as Mukhapaka, while Acharya Sushruta and AcharyaVaghbhata have described it as Sarvasara.

Nidan or causes of mukhapaka

These causes can be divided into two groups:

A) Underlying Factors from food (Aahar)

B) Behavioural Causes (Vihar)

Hetu

A) Aharaj
Mansahar
Shakahar
Dugdhahar
Ikshuvikruti

B) Viharaj

1) Sleeping in prone position

- 2) Ayogyadantadhavan
- 3) Atiyog of Dhoompaan, Vaman and Gandush
- 4) AyogyaSiravedha

• **Roop - Symptoms and Signs:-** Disease is located in entire oral mucosa is caused by Vata, Pitta, Kapha and Rakta. The classical text have described the following symptoms and signs 1) Refuse to breastfeeding 2) Excessive salivation 3) Regurgitation after feeding 4) Sphota - Ulceration 5) Satodavedana - Pricking sensation around ulceration 6) Daha - Burning sensation 7) Kandu - Itching 8) Kaphasavarnavrana.

Mukhapaka:- Types:- AcharyaSushruta has mentioned 4 types of Sarvasar 1) VatajSarvasar 2) PittajSarvasar 3) KaphajSarvasar 4) RaktajSarvasa

Sadhy-Asadhytva:- All the types of mukhapak are curable by medicine. All Acharya have mentioned medicinal treatment for mukhapak.

Samprapti of mukharoga:- Due to above mentioned etiological factors vitiated Doshas with Kapha dominance cause disorders of oral cavity. Samprapti of mukharoga is explained on the basis of hetusevan.

Chikitsa of mukhapak

NidanParivarjan:- Nidanparivarjanchikitsa is of prime importance to arrest further progress of disease that includes proper hygiene of breasts prior and after feeding and also maintenance of baby's oral hygiene. We should avoid of keeping baby in prone position. After finding of etiological factors {Hetusevan}, if we eliminate it from aharavihara of mother and child, there should be reduced recurrence of the disease in babies. So along with Yuktivyapashraya and daivavyapashrayachikitsa, we should advice patient's mother to avoid etiological factors including dietary professional and psychological factors.

General treatment of mukharoga

Chakradatta mentioned that in mukhapaka we can use Darvirasakriya with honey for local use for healing of ulcers. In every type of Mukhpak we can use kwath of Triphala, Patha, Mridvika and leaves of Jati with Honey for Mukhdhavan.

- 1) Kawal:- In both these upkramas medicine are held in oral cavity, the only difference in these two types is the amount of drug held in the mouth. In Gandush the mouth is filled with medicine so that it cannot be moved (i.e. amount is more), where as in kawal the amount of medicine is less so that it can be moved in the oral cavity. But in small children we cannot use kawal or Gandush.
- 2) Gandush:- Upakramas are useful in diseases of the neck, shirorog, ear diseases and diseases of oral cavity. They are also useful in Netraroga, excessive salivation (diseases of salivary gland) kanthrog, diseases of mouth, nausea, anorexia, and rhinitis.
- 3) Raktamokshan:- Raktamokshan means drainage of vitiated blood outside the body. Local Raktamokshan is one of the ashuphaldayeechikitsta in mukhrogas. It directly acts on dushitaraktadhatu. Removal of dushitarakta, pacifies all the symptoms of mukharoga and give instant relief. Like other treatment of mukharoga Raktamokshana is also contraindicated in infants.
- 4) Nasya:- Nasya is important treatment in urdhvajatrugat (above neck region) vikara and Mukhapaka is one of them. In nasya karma medicines are instilled in nose but Acharya had told that it is contraindicated in children.

Systemic treatment

- Kayavirechan:- This type of treatment is required when route of the pathogenesis lies in Amashay or Pakvashaya so mild virechana is given to mother. Virechan is chief treatment for Pitta Dosha and it also causes Raktadhatu prasadan. It normalises the path of Vata dosha which further leads to correct constipation, hence breaking the pathogenesis of Mukharog
- 2) Shirovirechan:- Shirovirechan is the procedure for elimination of vitiated doshas chiefly accumulated over neck region(urdhvajatru). As it is the nearest

route to eliminate those doshas, therefore advisable in mukharoga.

- 3) Pathyapathya:- Pathya:- In all oral diseases following dravyas are recommended in ahara Old rice Wheat Bean Horsegram Bitter gourd Serpant gourd Radish Camphour water Tambul Khadirghruta Things having Katu and Tikta rasa As we go through the gunas of this dravyas all are tiktarasatmak and sheetveerya therefore usefull in Kaph Pittajvyadhi.
- 4) Apathya:- In all oral diseases following things are contraindicated curd, milk and its derivatives, guda, sweets, black gram, As we go through the gunas of above dravyas, all are ushnaveeryatmak causing vitiation of pittadosha in the samprapti of mukhapaka. Non-oily things are heavy to digest and abhishyandi edible by infant's mother should be avoided. So other hetus which causes Mukhapaka should be avoided.

Modern aspects of pathya-apathya

Poor oral hygiene, and also poor hygiene of breasts before and after feeding are apathya of mukhapaka. Irrational use of antibiotics should be avoided.

Types of Stomatitis

(A) Traumatic stomatitis

Traumatic stomatitis is commonly caused by

- i) Vigorous used of hard tooth brush
- ii) Ill-fitting dentures
- iii) Jagged teeth
- iv) Simple cut or burn of the mouth
- v) Thermal and radiation injury

(B) Infective stomatitis

- (1) Viral stomatitis:- It is caused by herpes simplex or herpes zoster virus. It is characterized by small, multiple, painful vesicles on the lips, buccal mucosa and palate.
- (2) Bacterial stomatitis:- Vincent's angina:- Vincent's angina is also called as ulcerative stomatitis and also Acute ulcerative gingivitis.
- (3) Fungal stomatitis:- Monomial Stomatitis (Thrush):-Definition:- It is the prototype of oral infection caused by yeast like fungus. It is the superficial infection of upper layer of oral mucous membrane and results in formation of patchy white plaque or flecks on mucosal surface.

Clinical features

(a) In infants:- Age: - In neonates, oral lesions start between the 6th and 10th day after birth. Cause: -Infection is contracted from the maternal vaginal canal where candida albicans flourishes during the pregnancy. Appearance: - The lesions in infants are described as soft white or bluish white, adherent patches on the oral mucosa which may extent to circumorally tissue. Symptoms: - They are painless and noticed on careful examination. They may be removed with little difficulty.

(b) In children:- Sites: - Common sites are roof of the mouth, retro molar area, and muco-buccol fold. But it is common no any other mucosal surface and it is common in women as compared to male. Prodromal Symptoms:- Prodromal symptom like rapid onset of bad taste may be there. Spicy food will cause discomfort. Symptoms: - Patient may complain of burning sensation and there may be history of dryness of mouth.

Signs:- Inflammation, erythema and painful eroded areas may be associated with this disease. - Sometimes typical, pearly white or bluish white plaque. - It is multiple, curdy, loosely adherent patches on any part of oral mucosa. - Lesions are relatively inconspicuous. - White patches of it are easily wiped out with wet gauze which leaves either a normal or erythematous area or atrophic area. - Deeper invasion by the organisms leaves an ulcerative lesion upon the removal of patch.

(C) Bechet's syndrome

It is a disease of uncertain etiology that may resemble an infectious origin. Triad :- 1. Recurring oral ulcers 2. Recurring genital ulcers 3. Eye lesions

Classification :-

- a. Mucocutaneous Oral, genital and skin lesions.
- b. Arthritic Arthritis, in addition to muco-cutaneous lesions.
- c. Neuro-Ocular Neurologic, ocular and mucocutaneous lesions.

Etiology:- It is caused by immune complexes that lead to vacuities of small and medium sized blood vessels. There may be inflammation of the epithelium caused by immmmune competent T lymphocytes and plasma cells.

(D) Angular stomatitis

Cracks or superficial ulceration at the corners of the mouth is known as angular stomatitis. Angular stomatitis is also called as Cheilosis or Perleche.

(E) Stomatitis with malnutrition

Various types of stomatitis often remain associated with malnutrition. The mucosa of the tongue may undergo atrophy. Similarly thinning of the oral mucosa makes the mouth most susceptible to trauma, hot drinks and spices. Vitamin B:- In this group nicotinic acid deficiency will lead to Pellagra (Means rough skin). This will cause excessive salivation. The epithelium of the tongue becomes desquamated. The inside of the mouth becomes fiery red and painful. Riboflavin deficiency will also lead to atrophy of lingual papillae.

Vitamin C:- Deficiency of this vitamin will cause scurvy. Features of the stomatitis due to this disease are loosening of the teeth and bleeding gums.

Iron:- Iron deficiency anemia in women about menopause is particularly known as Paterson- Kelly syndrome. This syndrome is the combination of smooth tongue, desquamation of buccal and pharyngeal mucosa and subsequently, dysphagia.

(F) Stomatitis scarlatina

Scarlet fever is a highly contagious systemic infection occurring predominantly in children, caused by β -hemolytic streptococci. Scarlet fever is common in children during winter months. Incubation period:- It is 3 to 5 days.

Symptoms:- Patient exhibits severe pharyngitis and tonsillitis, chills, fever and vomiting.

Signs:- Throat becomes highly erythematous and exudation is common. There may be enlargement and tenderness of regional lymph nodes.

Skin:- Characteristic, diffuse, bright scarlet and dusky red skin rashes which appear on the second or third day of illness. After 3 to 4 days, the rash fades.

(G) Gangrenous stomatitis

It is also called as Noma, Cancrumoris. It is rapidly spreading gangrene of oral and facial tissues occurring usually are debilitated or nutritionally deficient person Predisposing Factors :- Predisposing factors play an important role in the development of the condition, since it occurs chiefly in persons who are undernourished or debilitated from infection such as diphtheria, dysentery, measles, pneumonia, scarlet fever, syphilis, tuberculosis, and blood dyscrasias, including anemia. Thus Noma may be considered a secondary complication of systemic disease rather than primary disease. Nowadays, if this disease is at all seen, it is often a complication of leukemia.

(H) Uremic stomatitis

With impaired renal function, a decreased GFR, and the accumulation and retention of various products of renal failure, the oral cavity may show a variety of changes as the body progresses through an azotemic to a uremic state.

(I) Denture stomatitis

Denture–induced stomatitis/ Denture sore mouth/inflammatory papillary hyperplasia/ chronic atrophic candiasis/erythematous candidiasis. Denture stomatitis is the direct sequelae caused by wearing dentures.

Treatment

Rinsing mouth with salt water to reduce pain of the ulcer.

- Use of over- The counter mouthwashes which contain Benzydaminehydrocloride are known to be anaesthetic which reduces pain but thesemay be unsuitable for children.
- Use of formulations of corticosteroid which contain triamcinolone acetanilide and hydrocortisone hemi succinate.
- Use of topical medicines to reduce swelling and pain.
- Avoiding spicy and acidic food which is important to restrictfurther irritation in the sores.

- Eating garlic.
- Applying milk of Magnesia on the sores.
- Use of Anaesthetic, Anti-inflammatory drug. Antiseptics.
- Use of oral gel like Orasep oral gel, kena-cort gel etc.
- Gentian violet May be effective but it stains skin and cloths and is associated with mucosal ulceration.

REFERENCE

- 1. Sushrut, Sushrutsamhita (Englishtranslation) P. V. Sharma, Chaukhambavishvabharti oriental, Varanasi, Dalhan, Reprint, Sutrasthan, 2005; 17(12).
- Sushrut, Sushrutsamhita (Englishtranslation) P. V. Sharma, Chaukhambavishvabharti oriental, Varanasi, Dalhan, Reprint, Nidansthan, 2005; 16(66).
- 3. Sushrut, Sushrutsamhita (Englishtranslation) P. V. Sharma, Chaukhambavishvabharti oriental, Varanasi, Dalhan, Reprint, Sutrasthan, 2005; 45.
- Sushrut, Sushrutsamhita (Englishtranslation) P. V. Sharma, Chaukhambavishvabharti oriental, Varanasi, Dalhan, Reprint, Nidansthan, 2005; 16(64).
- Sushrut, Sushrutsamhita (Englishtranslation) P. V. Sharma, Chaukhambavishvabharti oriental, Varanasi, Dalhan, Reprint, Nidansthan, 2005; 16: 64-66.
- Sushrut, Sushrutsamhita (Englishtranslation) P. V. Sharma, Chaukhambavishvabharti oriental, Varanasi, Dalhan, Reprint, Nidansthan, 2005; 16(15).
- Sushrut, Sushrutsamhita (Englishtranslation) P. V. Sharma, Chaukhambavishvabharti oriental, Varanasi, Dalhan, Reprint, Nidansthan, 2005; 16(66).
- Sushrut, Sushrutsamhita (Englishtranslation) P. V. Sharma, Chaukhambavishvabharti oriental, Varanasi, Dalhan, Reprint, Nidansthan, 2005; 16: 64-66.
- Vaghbhat, Aashtangh Hruday (Hinditranslation) Dr Bhrahmanand Tripathi, Chaukhambasancritpratishtan, Varanasi, Reprint, Uttarsthan, 2013; 21(3).