

CLINICAL PRACTICE OF PRACHANNA IN GUM DISORDERS: A STEP TOWARDS GLOBALISATION

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ABSTRACT

Prachanna is a type of bloodletting procedure used where the vitiated blood is localized. Poor oral hygiene is one of the common causes for pus and blood discharge from the gums. Periodontitis is an inflammation of the Periodontium i.e. Gingiva, Cementum, Periodontal ligaments and alveolar bone. It can lead to the destruction of gums, progressive loss of the alveolar bone, and if left untreated, can lead to the loosening and subsequent loss of teeth. It is the prime cause of tooth loss in adults, according to the NIH. Pus discharge and bleeding from the gums are observed in *Danthavestaka*. In chronic stage tooth became loose. It is *arakthajasadyaviadhi*. As the number of patients suffering from this disease is increasing day by day, *Ayurvedic physician* should also make effort to find out effective remedy for the patients of *Danthavestaka* from *Ayurvedic classics*. *Prachanna* is a type of *rakthamokshana* followed in this case.

Keywords: *Prachanna, Periodontitis, Periodontium, Danthavestaka*

INTRODUCTION

Causes for pus discharge from gums can vary from person to person. Peoples who all are not concentrate on brushing and oral hygiene their teeth risk getting food and other particles stuck between their teeth and gums. The bacteria which all are present can start putrefy that and start damage the gums, tooth, and surrounding structures and causes the oral disorders, leads to inflammation of gums, swelling, pain etc. This infection can spread to ligament level and causes other symptoms like thick yellow pus discharge, brake down of gums, tooth decay etc. "Periodontitis" word comes from the Greek peri, "around", odous , "tooth", and the suffix -itis, in medical terminology "inflammation". If gingivitis is not treated, it may lead to Periodontitis - a much more

serious disease, warned the NIH. It is the prime cause of tooth loss in adults, according to the NIH.

According to *Acharya Susrutha*, Pus discharge and bleeding from the gums are observed in *Danthavestaka*. In chronic stage tooth became loose. In *Ayurvedic texts*, there are various methods used as a line of treatment, some of which are very effective, so simple and safe. In *Susruthasamhita Rakthavisravana* is directly indicated for *danthavestaka*.¹According to *Acharya Susrutha*, *Prachanna* is a type of *Rakthamokshana*, it should be done quickly as straight small even lines with instrument, not very deep, not very superficial. The instrument should not damage vital spots and joints.²there is no need to state that special need of an alternate management for this type of condi-

tions, where modern medical management has its own limitation. Thus an effort is made to evaluate the efficacy of *Prachanna* in *Danthavestaka*.

AIMS AND OBJECTIVES:

1. To study the etiopathogenesis of *Danthavestaka* in the light of *Ayurvedic* and Periodontitis in modern medical science.
2. To study the role of *Prachanna* in the management of *Danthavestaka*.

MATERIAL AND METHODS:

A patient suffering from features of *Danthavestaka* attending the O.P.D. and I.P.D. of Ayurveda College and hospital, Coimbatore was selected randomly. The patient was a young girl of 18 year age. She was suffering from bleeding gums along with pus discharge. Pus and Blood discharge present with simple touch, during brush, after biting any fruit or hard substance. Patient was diagnosed on the basis of signs and symptoms as per *Ayurveda* as well as modern texts. On examination, yellowish deposits present at root of the teeth, gums are little swollen. Pus escaped with little pressure on gums, gums are loose and slightly inflamed. Complete history of the patient with temperature, pulse, respiration, blood pressure and personal history was taken, before going to *Aharana* and *Prachanna*. There is no need to be hospitalized of the patients during the procedures *Aharana* and *Prachanna*. Both the procedures are effective, simple, cheap and safe for the patient having *Danthavestaka*. Less fear of complications in both of the procedures to be concerned. These two gives relief spontaneously in the cardinal symptoms of *Danthavestaka*.

PROCEDURE: Procedure done after consent of the patient. The Procedure room was well prepared with all the equipments. *Triphala Kwatha* for *Gandusa* was prepared. *Babula gum*, *Suchi* (24 gauze hypodermic needle), *Danthamalanirharanasha-*

laka, Artery forceps, *Plota* (gauze), *Pichu* (cotton) and other needs are kept ready for use. Patient was advised to have light diet-before procedure. The patient was advised to lie down on the bed in supine position. Then the gums area was cleaned with dry swab. Here, do not use spirit because it irritates the area. Tartar was removed gently with *Danthamalanirharana shalaka*, which was accumulated between the surface of the teeth and gums. Slight bleeding was observed. *Haemostasis* was secured. Water soaked *babula gum* was applied on gums. 24 Gneedle held in right hand with thumb and index finger and the lower lip held firmly with left hand and gentle pricking was done according to requirement. The patient got bearable slight pain during pricking. No local Anesthesia given during this procedure. Then bleeding was wiped with swab at the *Prachanna* site. She had given complaint as slight heaviness and pricking pain at local site. *Triphala kwatha* was used to gargle. Usually there is no need of any prophylactic antibiotics because our *Ayurvedic* medicines having this effect. No complications were found after procedure. After *Prachanna* the patient was advised to avoid sour and pungent substances in food, meat, fish, food prepared with black gram, curd, soft brush for brushing, too much conversation, expose to cold breeze, cold bath, day sleep, anger, grief till she attains good strength. Patient was advised for local application of powder of *Khadiradhi* on the gums from the evening of the day for a week.

OBSERVATION AND RESULTS:

The improvement in the patient was assessed mainly on the basis of relief in the cardinal signs and symptoms of the disease. Next day patient told no heaviness and pricking pain at gums. Swelling of gums, redness was also reduced. Slight

bleeding present at the time of brushing at morning for two days. Third day no bleeding and pus discharge while brushing and after woke up from bed. She observed daily after every brushing and after having food. Rarely slight bleeding was found after pressing. No swelling was found after every brushing. Gradually gums became normal colour. After 15 days no inflammation, no bleeding, pus discharge found.

DISCUSSION:

Danthavestaka is commonly seen in society as prominent gum problem. Almost everyone will experience at least one experience of bleeding gums at some point in his or her life. There is no direct reference regarding *Nidana* and *Samprapti*. *Ayurveda* considers *Danthavestaka* as a disorder of *Danthamula*. *Danthavestaka* expresses the signs and symptoms as Pus and blood exude from the gums, the teeth become shaky. Vitiated *Raktha* is the main causative factor in the pathogenesis³. Treatment for *Danthavestaka* bloodletting should be done first and then powder of *lodhra*, *ptanga*, *yastyahva* and *laksha* added with honey should be applied. Decoction of *Panchavalkala* bark added with honey, ghee and sugar should be used for gargling; ghee cooked with drugs of *kakolydi gana* and ten part of milk be used for nasal drops^{4,5,6}. Tartar formation is also one of the cause for development of *Danthamulagata roga*. Manual removal is the main treatment for tartar. *Dantha mala nirharana* comes under *Aharana yoga*⁷. *Danthavestaka* can be equated with Periodontitis in modern parlance.

Periodontitis is an inflammation of the Periodontium (the tissues that surround and support the teeth). It consists of four tissues i.e. gingiva, cementum, periodontal ligaments and alveolar bone. It is caused by microorganisms that adhere to and grow on the tooth's surfaces, along with an over aggressive immune response against these microorganisms. It consists bleeding of gums while brushing teeth, and are spit-

ting out blood after brushing, biting into hard food, Gum swelling, Pus from root of teeth, Halitosis, and a persistent metallic taste in the mouth, Gingival recession leads to exposure of root of teeth. Deep pockets between the teeth and the gums, loose teeth in the later stages. If left undisturbed, microbial plaque calcifies to form calculus, which is commonly called tartar. Periodontitis is very common, and is widely regarded as the second most common dental disease worldwide, after dental decay, and in the United States has a prevalence of 30–50% of the population, but only about 10% have severe forms. Periodontal diseases are one of the more prevalent oral diseases affecting more than 50% of Indian community⁸.

According to the American Academy of Periodontology, there are several types of Periodontitis, including: Chronic Periodontitis, the most common form, is characterized by pocket formation and gum recession. Aggressive Periodontitis is characterized by rapid loss of gums and bone destruction. Necrotizing periodontal disease is characterized by necrosis (death) of gum tissue, periodontal ligaments and alveolar bones, which cause lesions. National oral health care policy was accepted in principal to be included in national health policy in 1995 by ministry of health and family welfare, Government of India⁹. The successful periodontal treatment starts with establishing oral hygiene. This includes twice-daily brushing with daily flossing, interdental brush is helpful if space between the teeth allows. Management involves nonsurgical cleaning with a procedure called scaling, Root planning, debridement and Antibiotics. Many surgical approaches are used in treatment of advanced Periodontitis, including open Flap surgery, Soft tissue grafts, Bone grafting, Guided tissue regeneration,

Enamel matrix derivative application. Allopathic management of Periodontitis is far away from the complete cure of the disease.

Maharshi Susruta has told *Astavidha sastra karma* i.e. *Chedana* (Excision), *Bhedana* (Splitting), *Lekana* (Scraping), *Vyadana* (Puncturing), *Aharana* (Removing/ Extraction), *Visravana* (Draining), *Seevana* (Suturing)¹⁰. According to *Vagbhata sastrakarma's* are *Utpatana* (Elevation or Extraction), *Patana* (Tearing), *Seevana* (Suturing), *Esana* (Probing), *Lekana* (Scraping), *Prachanna* (Scratching), *Kuttana* (Multiple Pricking/ Beating), *Chedana* (Excision), *Bhedana* (Splitting), *Vyadana* (Puncturing), *Manthana* (Churning), *Grahana* (Catching), *Dahana* (Cauterization)¹¹. According to *Maharshi Susruta*, *Prachanna* is a type of *Rakthamokshana* but *Acharya Vagbhata Prachanna* and *Kuttana* both are mentioned separate in *Sastrakarma*. These both are performed with *sastra* and *suchi*.

In *Panchakarma Chikitsa*, the vitiated *Doshas* are purified whereas in *Siravyadha* to let out *Rakta Dhatu* along with vitiated *Doshas*. The classics were agreed *Rakta* as fourth *Dosha*¹². The entire body is nourished by *Siras*¹³. To alleviate vitiation of *Dosha* involving a large area of body, *Raktmokshana* from *Sira* is the only way as it exerts its effects on the entire body¹⁴.

Rakthamokshana the bloodletting technique is advocated in major diseases where disease predominant with *Rakthadosa* or in which oral medicines are not useful. *Rakthamokshana Karma* provides '*Ashu Vyadhya Shanti*'¹⁵. *Rakthamokshana* is classified into *Sastrakrutha visravana* (bloodletting with sharp instruments) and *Asastrakrutha visravana* (bloodletting with other than metallic instruments). *Prachanna* and *Siravyadana* comes under *sastrakrutha visravana*.¹⁶ *Prachanna* proce-

dure is indicated to remove *pindita sputa rakta in twak* (subcutaneous or submucosal). This procedure can do with small needle or with instrument. This procedure is adapted when *dosa* is accumulated in one place. It should not do at *marma, sandhi, asthi* and *snayu*. *Siravyadana* is indicated when *dosa* spread universal, throughout the body. If the disease is not localized, as it involves a large area of the body; *Raktmokshana* by *Sira* is preferred as per *Susrutha Samhita*¹⁷. *Vyadhana* procedure should be done with *Vrehimukasasthra, Vetasapatraara, Kutarika, Suci*¹⁸. He has mentioned *Siravyadha* is an emergency management to achieve better results in diseases those are not relieved by *Snehana, Lepadiprocedures*.¹⁹ *Siravyadha* is mentioned as half of the therapeutic measure in *Shalya tantra* like *Basti* in *Kayachikitsa*²⁰. *Asastrakrutha visravana* is more preferable for delicate persons; It consists of 4 methods *Shrunnga* (Application of Horn), *Jaluka* (Application of Leeches), *Alabu* (Application of bottle gourd), *Ghati* (application of small pot). Among all the procedures, *Siravyadana* is superior, because it destroy the diseases like how crop of paddy destroyed, when water removed from field²¹.

Mamsa Dhatu is produced from *Rakta Dhatu* in the sequence of production i.e. '*Uttarottara Dhatu Nirmana Krama*'²². So for the proper production of *mamsa dhatu*, firstly the vitiation of *Rakta* should be dealt with. Though *Danthavestaka*, considerably small area gums are affected, thus benefitted by *Prachanna*. So, vitiated blood is removed from the local area. *Triphala kasaya* having *vranaropana, sodhana* etc properties. It leads to proper development of gums with strong teeth.

CONCLUSION

When it comes to *Raktha*, all *Ayurvedacharyas* unanimously agree that *Rak-*

thamokshana is the best treatment. Prachanna is a very specific method of Rakthamokshana used to remove lodged superficial blood from small area. So this procedure is drain blood from the small vessels and capillaries. After bloodletting which facilitate good atmosphere to heal its own. Even though Rakthamokshana has been established as an effective modality, Prachanna is not popularized much. Ayurvedic therapies require restructure globally to meet the rising demands with the application of information and communication technology.

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