

## CASE CONTROL STUDY OF KRIMIDANTA IN VIEW OF AYURVEDA

Chaudhari Rupali<sup>1</sup>, Sathe Kalpana Dilip<sup>2</sup><sup>1</sup>M.D. kriya Sharir, Ph.D. scholar M.U.H.S. Nashik, Maharashtra, India<sup>2</sup>M.D. Kriya Sharir Ph.D. Ayurveda H.O.D. Kriya Sharir Department, Sumatibhai Shah Ayurveda Mahavidyalaya, Malwadi, Hadapsar, Pune, Maharashtra, India

## ABSTRACT

The dental disease are categorized as *dantashool*, *krimi danta* etc. in Ayurveda. Vitiated *vata dosha* may cause structural deformity at the tooth surface. Tooth starts paining and becomes black, becomes mobile with bleeding gums. This syndrome may be called "*Krimidanta*." (Dental caries) in Ayurveda. To develop methodology of *Danta pariksha* to study *Dantarogas* for clinical research in *Ayurveda*. Symptoms of *Krimidanta* described in *Sushruta Samhita* are *dalana/maharuja/vedana* (toothache), *sheetadanta/dantaharsha* (sensitive teeth), *krishnachidri/koth* (black caries), *chala danta* (mobile), *sravi* (pus formation) and *sasanrambho/durgandha yukta shoth* (inflammation with foul smell). *Dantad* type of disease is due to *shonitaj krimi / adrishya krimi* (unknown bacteria) which destroy dental structure and gums. Patients of dental caries were observed in Jalgoan Dist. Maharashtra. 30 male and female aged 30 to 45 years were included of Maharashtrian community. Volunteers having pregnancy, menopause, chronic hormonal diseases like Diabetes mellitus, hypo/hyper thyroidism, parathyroidism, bone deformities like osteoarthritis, malignancy were excluded. Clinical assessment was done according to symptoms present in *krimidanta* as per *Ayurvedic* parameter and gradation for each symptom was done by *Trividh pariksha* with their X-rays, *Danta sampad* symptoms are verified. Opinion of Dentist was taken. Severity of *Koth* (degeneration) is 33.33%. X-ray shows *chidra* (hollowness), *Shoth* (inflammation) is 26.67%, *Vedana* (pain) is 76.67%, and *Durgandha* (bad breath) is 6.67%. It is observed that the *Vatprakop* symptoms were found most in *Krimidanta* (60%). *Pittaprapkop* symptoms were also found 40% in *Krimidanta*. Symptoms of *Dantaroga* like *Krimidanta* may be correlated and tested with *Trividh pariksha* and the gradation method of the symptoms.

**Key Words:** *Asthi dhatu Krimidanta chidra pittaprapkop*

## INTRODUCTION

As per *Ayurveda* well balanced *tridoshas* are the basic unit of a healthy life, while imbalance among them causes disease. Now a day there is considerable increase in dental problems such as toothache, dental caries, gingivitis, periodontitis etc<sup>1</sup>. These disease are

categorized as *Dantaroga* such as *dantashool*, *krimi danta* (dental caries), etc in *Ayurveda*.<sup>2</sup>

The Pathophysiology of *krimidanta*, mainly points towards the vitiated *vata dosha* causing structural deformity at the tooth surface. Further, it

combines with plaque to form dental caries, gingival and periodontal diseases. Among the three *dosha* dominant *vata* makes teeth hollow and damages nerves, the food particles and dirt get accumulated in this cavity and can damage nerves. This results in bad breath and accumulation of bacteria (small *krimi*). Teeth starts paining, becomes black, get swollen, becomes mobile with bleeding gums. This syndrome may be called "Krimidanta." (Dental caries) in Ayurveda.

**AIM -**

To study " Krimidanta" with Ayurvedic perspective

**OBJECTIVE -**

To develop methodology to study *Dantarogas* for clinical research in *Ayurveda* as this might help future studies in *Danta Parikshan*.

**REVIEW OF LITERATURE-**

*Acharya Charaka* and *Sushruta* have described *danta* as a type of *Asthi dhatu*.<sup>3</sup> On the other hand *Acharya Sharangadhara* has described *Danta* as *Asthi upadhatu*.<sup>4</sup> *Danta* is one of the substance which cannot be decomposed (*na vishiryante*)<sup>5</sup> in the body without decay.

Symptoms of *Krimidanta* described in *Sushruta Samhita* are *dalana/maharuja/vedana* (toothache), *sheetadanta/dantaharsha* (sensitive teeth), *krishnachidri/koth* (black caries), *chala danta* (mobile), *sravi* (pus formation) and *sasanrambho/durgandha yukta shoth* (inflammation with foul smell).<sup>6</sup>

*Dantad* type of disease is due to *shonitaj krimi / adrishya krimi* (unknown bacteria) which destroy dental structure and gums. If immobile can be treated

with steam, bloodletting and *vatahar* medicines; if mobile extraction of tooth can be done.<sup>7</sup>

**MATERIAL AND METHODS -**

A complete literature review related to subject present in *Ayurvedic samhitas*, various Books and Articles written by Ayurvedic scholars and relevant modern literature has been taken. Patients of dental caries were observed with *trividh pariksha* and their X-rays were taken.

**Study site-** Jalgoan Dist. Maharashtra.

**Sample size -** 30

**Inclusion criteria -**

Sex - Male and Female

Age - 30 to 45 years. Community – Maharashtrian

**Exclusion Criteria -**

1. Pregnancy, Menopause, Chronic Hormonal diseases like Diabetes Mellitus, hypo/hyper thyroidism, parathyroidism, bone deformities like osteoarthritis, malignancy.

**Study Evaluation -**

1. Clinical assessment has been done according to symptoms present in *krimidanta* as per *Ayurvedic* parameter and gradation for each symptom has been done.
2. Observation has been done by *Darshana, Sparshana* and *Prashna Pariksha (Trividh pariksha)*.
3. *Danta sampad* symptoms are verified.<sup>8</sup>
4. Opinion of Dentist has been taken.
5. Modern parameter -X-ray has been taken of affected teeth.

**OBSERVATION:**

Observation based on correlative symptoms of dental caries and *Krimidanta* with Gradation.

**Table No. 1**

<i>Krimidanta lakshanas</i>	Nil(0)	Min(1)	Mod(2)	Max(3)
-----------------------------	--------	--------	--------	--------

Decay( <i>Krishna chidra/ koth</i> )				
Inflammation( <i>shoth</i> )				
Pain( <i>vedana</i> )				
Foul smell ( <i>durgandha</i> )				



Photo No. 1 (*Koth*)

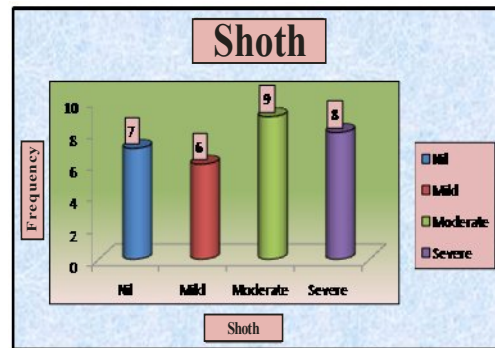


Photo No. 2 (*Vedna*)

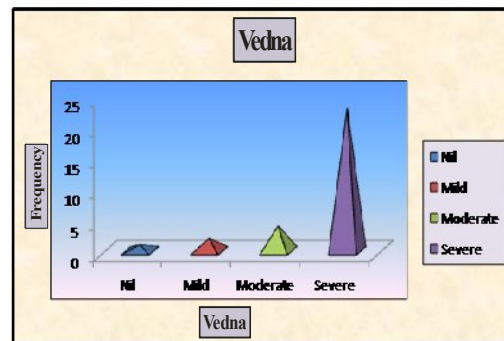


Photo No. 3 (*Shoth*)

Graph No -3

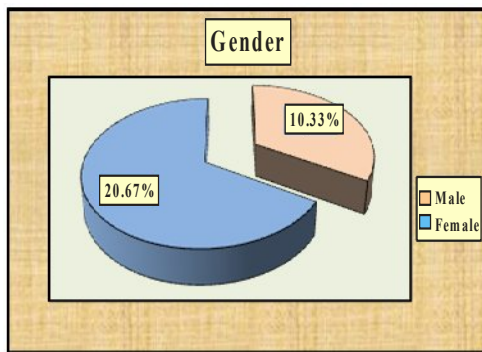


Graph No -4

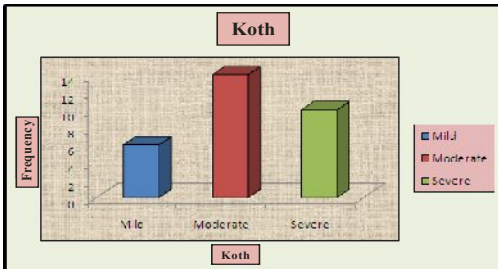


Statistical analysis of Data based on Frequency and percentage.

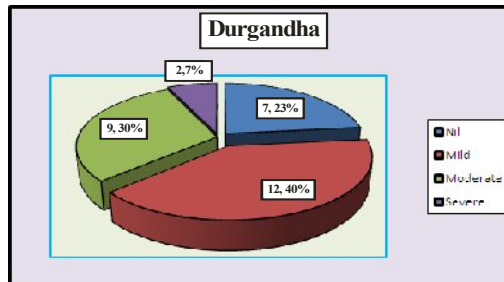
Graph No -1



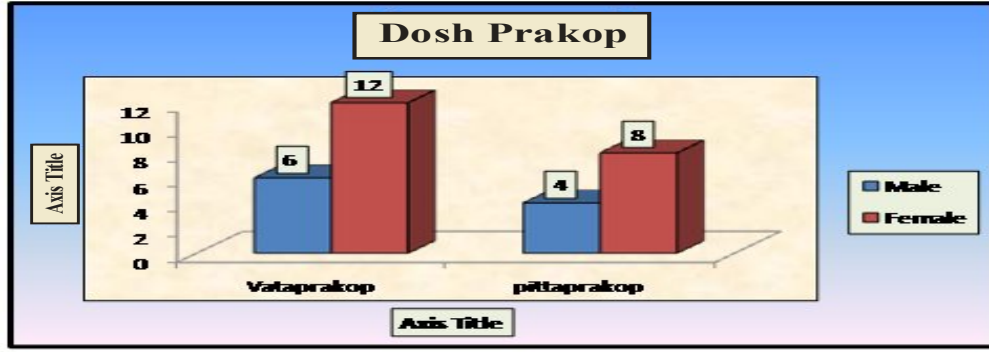
Graph No -2



Graph no.-5



Graph no.-6



Vataprakop Symptoms - Vedana, Tod, Bhed  
Pittaprakop Symptoms - Shoth, Aaraktavarna

Table no.-2 -Master Table

Sr.No.		Category	Frequency	Percentage
1	Gender	Male	10	33.33
		Female	20	66.67
2	Decay (Koth)	Mild	6	20.00
		Moderate	14	46.67
		Severe	10	33.33
3	Inflammation (Shoth)	Nil	7	23.33
		Mild	6	20.00
		Moderate	9	30.00
		Severe	8	26.67
4	Pain (Vedana)	Nil	1	3.33
		Mild	2	6.67
		Moderate	4	13.33
		Severe	23	76.67
5	Foul Smell (Durgandha)	Nil	7	23.33
		Mild	12	40.00
		Moderate	9	30.00
		Severe	2	6.67
6	Dosh prakop (Vitiation of dosh)	Vata	18	60%
		Pitta	12	40%
		Kapha	00	00%

## DISCUSSION

- 1) Severity of Koth is 33.33%. X-ray shows *chidra* (hollowness) and the emergency of treatment.
- 2) Severity of Shoth is 26.67% .
- 3) Severity of Vedana is 76.67%.

- 4) Severity of Durgandha is 6.67% .
- 5) Symptoms of krimidanta like Koth, Shoth, Vedana and Durgandha may be correlated and tested with the gradation method of above symptoms.
- 6) It is observed that the persons are having *vataprokop* and *pittaprakop lakshanas* in *Krimidanta*. *Vataprakop*

symptoms were found most in *Krimidanta* (60%) . *Pittaprakop* symptoms were also found 40% in *Krimidanta*. Study population had signs and symptoms of toothache, headache, sometimes swelling, pus and sensitivity in tooth affected.

#### INFERENCE-

Symptoms of *Dantaroga like Krimidanta* may be correlated and tested with *darashana- Sparshana- prashana pariksha* and the gradation method of the symptoms.

#### REFERENCES-

1. William G. Shafer, Mayanard K.Hine, Barnet, M. Levy, A text book of Oral pathology 4<sup>th</sup> edition, page no. 432, 447 and Priya Verma Gupta, Dental diseases differential diagnosis, Jaypee, 2008, Page no.118-159
2. Kaviraj Ambikadatta Shastri Sushrita Samhita, Chaukhamba Sanskrit Sansthan, 1993 Purvardha, Ni.16/29, page no. 297.
3. Vaidyaraj Jadhavji Trikamji acharya , cakrapanidatta, 4<sup>th</sup> edition, Munshiram Manoharlal publishers,1941, Cha.sha.7/6, page no.337.  
Kaviraj Ambikadatta Shastri Sushrita Samhita, Chaukhamba Sanskrit Sansthan, 1993 Purvardha, Su sha.5/21 page no.44
4. Vd. Gangadhar Shastri Sathe, Raghuvanshi prakashan, 4<sup>th</sup> edition, 1983, Sharangdhar samhita, part -1 5/13, page no. 31
5. Kaviraj Ambikadatta Shastri Sushrita Samhita, Chaukhamba Sanskrit Sansthan, 1993 Purvardha, Su su.26/24, page 110.
6. Kaviraj Ambikadatta Shastri Sushrita Samhita, Chaukhamba Sanskrit

Sansthan, 1993 Purvardha, Ni.16/29-32, page no. 297.

7. Kaviraj Ambikadatta Shastri Sushrita Samhita, Chaukhamba Sanskrit Sansthan, 1993 Uttardha, 54/15, page no. 297.
8. Nepal Rajguru Pandit Hemraj Sharma and Shrisatyapal Bhashagacharya, Chaukhamba Sanskrit Sansthan, 7<sup>th</sup>edition Vi. San.2057, Kashyapa Samhita Su. 20/8, page no. 13.

#### CORRESPONDING AUTHOR

##### Dr. Sathe Kalpana Dilip

M.D. Kriya Sharir Ph.D. Ayurveda  
H.O.D. Kriya Sharir Department,  
Sumatibhai Shah Ayurveda  
Mahavidyalaya, Malwadi, Hadapsar,  
Pune, Maharashtra, India

**Email:** kdsathe61@gmail.com

Source of support: Nil

Conflict of interest: None Declared