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## Role of *Brihatyadi Taila Gandusha* in the Management of *Krimi Danta* (Dental Caries)

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### ABSTRACT

The importance has been given to Dental hygiene to maintain health and beauty. The healthy teeth are very much necessary for healthy body. The disease, Krimi Danta is considered under Danta roga. Krimi Danta is characterized by blackish discoloration of tooth with cavity formation, loosening of teeth, foul fluid discharges associated with pain and swelling due to vitiated Vata followed by Pitta and Kapha.

Krimi Danta can be correlated to dental caries in modern science, in which bacteria damage the enamel which is the hardest structure of tooth as well as dentine and cementum. These tissues progressively break down, producing dental cavities. Pain is the commonest symptom in caries. Hence, the present study is taken up to evaluate the efficacy of 'Brihatyadi Taila' Gandusha' in the management of krimi danta.

### KEYWORDS

*Krimi danta, Gandusha, Dental caries, Danta roga*



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## INTRODUCTION

The disease, KrimiDanta is considered under Danta roga under the heading of Mukha roga. Krimi Danta is characterized by blackish discoloration of tooth with cavity formation, loosening of teeth, foul fluid discharges associated with pain and swelling due to vitiated Vata followed by Pitta and kapha<sup>1, 2</sup>. Krimi Danta can be correlated to dental caries in modern science, wherein bacterial process damage the enamel which is the hardest structure of tooth as well as dentine and cementum. These tissues progressively break down, producing dental cavities. Pain is the commonest symptom in caries.

In Ayurvedic texts a good numbers of medicaments are explained for strengthening the teeth and gums. These remedies are made from various plants and applied to the gums & tooth in the management of Krimi Danta<sup>3</sup>.

Majority of ingredients of Brihatiyadi Taila are having Tikta Katu & Kashaya Rasa, Laghu, Ruksha and Tikshna Guna, Ushna Virya, Vata, Pitta Kaphahara having Krimighna, Shoolahara, Sothaghana properties<sup>4</sup>.

Hence the present study is taken up to evaluate the efficacy of 'Brihatiyadi Taila'Gandusha in the management of krimi danta.

## CASE REPORT

A 40 years old female patient complained of blackish discoloration of tooth with cavity formation in right first molar tooth lower jaw with the associated complaint of loosening of teeth, foul fluid discharges associated with pain, swelling, hypersensitivity of teeth and foul smell in the mouth. On advice she underwent for IOPAR (intra oral per apical radiograph) on July 2018 and was found to have dental caries involved to the dentine. It was diagnosed as Krimi danta (Dental Caries). She was under Ayurvedic management for one week in Shalaky Department and marked relief was noted in pain, swelling and associated symptoms of krimi danta with Brihatyadi Taila Gandusha.

### PRADHAN VEDANA (CHIEF COMPLAINT)

Dantashula (Toothache), Sotha (Inflammation), Chhidrata (Cavity Formation), Srava (Discharge), Paka (Pus formation), AniyamitaRuja (Pain without reason)

### HISTORY OF PRESENT ILLNESS

Patient told that she was suffering from Mukha daurghandhya (Halitosis), Krishnata (Discoloration of tooth), Chalatva (Mobility of teeth) and Dantaharsha (Hypersensitivity of teeth) since last two years.



#### PAST HISTORY –

- Medical History - No history found
- Past Dental History - Tooth extraction of left third molar tooth in lower jaw.

#### FAMILY HISTORY -

- Medical – No history found
- Dental - No history found

#### PERSONAL HISTORY –

- Religion - Hindu
- Education - Graduate
- Marital Status - Married
- Occupation - House wife
- Socio-economic status - Lower middle class

- Oral Hygiene aid – Tooth Brush
- Cleansing Material – Tooth paste
- Frequency of cleansing teeth – Once daily

- Mukhasuddhi - Cold water
- Addiction – Pan, Tobacco chewing
- Diet – Mixed
- Dominant Rasa – Madhur and amla
- Appetite - Moderate
- Bowel - Irregular
- Micturation - Normal
- Sleep - Normal

#### ATURABALA PRAMANA PARIKSHA

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#### PRAKRITIAH -

- Saririka – Vataj
- Manasika - raja

- Sara - Madhyam
- Samhanana - Madhyam
- Satva - Madhyam
- Satmya - Aaharaj
- Ahara Shakti - Madhyam
- Agni - Visama
- Vyayama Shakti - Avara
- Vaya - Yuva
- Desha - Anoop

#### CLINICAL EXAMINATION -

##### GENERAL EXAMINATION -

- Pulse - 72 /min
- Temp – 98<sup>0</sup> F
- B.P. – 110/70 mm of Hg.
- Resp. Rate – 18 - 20 /min

##### ORAL EXMINATION

- Halitosis – Present
- Discharge - Present
- Palate - Normal
- Tongue – Coated
- Buccal mucosa – Normal

##### TEETH EXAMINATION

- No. of teeth presents - 30
- Carious teeth - Right first molar tooth in lower jaw
- Stage of carious Teeth - Decay invades pulp
- Color of teeth - Stain
- Occlusion - Malocclusion
- Food impaction - Present
- Mobility - 1<sup>o</sup>



- Filled Teeth - No
- Hypersensitivity - Present

#### GUMS EXAMINATION

- Color - Oedematous
- Consistency – Pain and occasionally bleeding
- Bleeding on probing - Present

#### LABORATORY INVESTIGATIONS

##### BLOOD

- Hb - 10.5 % gm
- Blood Sugar - Fasting 92.5 mgdl

##### URINE

- Routine and Microscopic – No abnormality found

##### RADIOGRAPH

- IOPAR - Dental caries involved to the dentine tissue.

#### DRUG, DOSE & DURATION

##### DRUG

Brihatyadi Taila Gandusha

##### DOSE

20 – 30 ml luke warm Brihatyadi taila gandusha twice daily for 7 days.

##### DURATION

Till samayak gandusha lakshna observed (aprox. 10-15 minute)

#### OBSERVATION

The effect of treatment was assessed subjectively by clinical observation on the basis of relief in signs and symptoms of the

disease. Signs and symptoms were assessed with the help of following scoring method.

#### METHOD

##### DANTASULA (ODONTOLOGIA)

- 0 – Absence of pain
- 1 – Occasional mild pain
- 2 – Moderate pain
- 3 – Severe pain

##### SOTHA (INFLAMMATION)

- 0 – Absence of Inflammation
- 1 – Mild Inflammation over gums in one or two regions with slight local tenderness.
- 2 – Moderate Inflammation
- 3 – Severe Inflammation causing difficulty in chewing food particles.

##### CHIDRATA (CAVITY FORMATION)

- 0 – Absence of cavity
- 1 – Mild appearance of cavity
- 2 – Noticeable appearance of cavity (Patient can observe cavity)
- 3 – Large size cavity causing lodgment of food stuffs.

##### DAURANGANDHYA (HALITOSIS)

- 0 – Absence of bad odour
- 1 – Presence of mild bad odour
- 2 – Presence of moderate odour
- 3- Constant presence of severe bad odour even after repeated cleaning of mouth.

##### KRISHNATA (DISCOLOURATION)

- 0 – Absence of discoloration
- 1 – Mild discoloration
- 2 – Half discoloration of cavity
- 3 – Full discoloration of cavity



### CHALATAVA (MOBILITY)

- 0° - Absence of mobility
- 1° - Noticeable movement in its socket within a range of 1 mm
- 2° - Movement of a tooth within a range of 2mm
- 3° - Movement of a tooth with more than 3 mm

### DANTAHARSA (ODONTITIS)

- 0 – Absence of hypersensitivity of teeth
- 1 – Mild hypersensitivity of teeth
- 2 – Moderate hypersensitivity of teeth
- 3 – Severe hypersensitivity of teeth

### SRAVA (DISCHARGE)

- 0 – Absence of discharge
- 1 – Mild discharge
- 2 – Moderate discharge
- 3 – Large amount of discharge.

### PAKA (PUS FORMATION)

- 0 – Absence of pus formation
- 1 – Mild pus formation
- 2 – Moderate pus formation
- 3– Copious amount of pus

### ANIYAMITA RUJA (PAIN WITHOUT REASON)

- 0 – Absence of pain
- 1 – Mild pain
- 2 – Moderate pain
- 3 – Severe pain

### IOPAR

- 0 – Absence of caries
- 1 – Involved enamel tissue
- 2 – Involved dentine tissue
- 3 – Involved Cementum / Pulp tissue

## RESULTS

The total effect of therapy was assessed considering overall improvement in signs and symptoms after the therapies. (Table No. 1)

Cured: 100% relief in the complaints

Marked improvement: 76% to 99% relief in the complaints

Moderate improvement: 51% to 75% relief in the complaints

Mild improvement: 26% to 50% relief in the complaints

Unchanged: up to 25% relief in the complaints

In this study we found that patient got 100% relief in chaltva, Srava, Paka, and Aniyamiya Ruja, marked improvement in Durgandhya, Dantashoola, Sotha, and Dantaharsha, and no improvement in Chhidrata, Krishnata, and IOPAR.

(Table No. 1)

## DISCUSSION

### PROBABLE MODE OF ACTION OF DRUG

The present study deals with the therapeutic aspect of the drug “Brihatyadi Taila” in dental caries.

**Table 1** Effect of Therapy

S. No.	COMPLAINTS	BT	3rd day	5 <sup>th</sup> day	7 <sup>th</sup> day	AT
1	Dantashula	3	3	2	1	1
2	Sotha	2	2	2	1	1
3	Chhidrata	2	2	2	2	2
4	Daurghandhya	3	3	2	1	1
5	Krishnata	2	2	2	2	2
6	Chalatva	1	1	1	1	0
7	Dantaharsha	2	2	1	1	1
8	Srava	1	1	0	0	0
9	Paka	1	1	0	0	0
10	AniyamitaRuja	1	1	1	1	0
11	IOPAR	2	2	2	2	2

**Table 2** Pharmacodynamic Properties of Brihatyadi Taila<sup>3</sup>

Drug	Rasa	Guna	Virya	Vipaka	Prabhava	Dosakarma
<b>Brahati</b>	Katu, Tikta	Laghu, Ruksha, Tikshana	Usna	Katu	Sothahara, shoolahara, krimighana	Kaphavathara
<b>Eranda</b>	Madhura	Snigdha, Tikshana, Sukshma	Usna	Madhura	Sothahara, shoolahara, krimighana	Kaphavathara
<b>Kantakari</b>	Katu, Tikta	Laghu, Ruksha, Tikshana	Usna	Katu	Sothahara, shoolahara, krimighana	Kaphavathara
<b>Bhumi kadamba</b>	Katu, Tikta, Kashaya	Laghu, Ruksha	Usna	Katu	Sothahara, shoolahara, krimighana	Tridoshsamaka
<b>Tila Taila</b>	Madhura, katu, tikta, kashaya	Vyavai, Guru, Snigdha, Sukshma	Usna	Madhura	Vishaghna,	Vataghna

It has been explained by Ashtang Hridaya.

- Brahti
- Eranda
- Bhumikadamba
- Kantakari

After going through the properties of the contents of Drug Brihatyadi Taila, it is seen to have predominantly Tikta, Kasaya, Katu, and madhura rasa, Laghu, Ruksha and Tikshana Guna, Usna Virya, Katu Vipaka. In contents of Brihatyadi Taila, Katu rasa act as Sodhana, Lekhana, Vrananasaka, Puyashodhak, Krimighna and Kaphaghna.

Kasaya rasa exhibit the Ropana, Sodhana, Lekhana and Raktasodhaka properties. Katu rasa exhibits kapha pitta shamaka activity

Madhura rasa is Ropaka, Vata-Pitta Shamaka and also acts as the immunity Promoter. (Table - 2)

Brihatyadi Taila provides statically significant relief in Dantashula (79.54%), sotha (77.77%), Daurghandhta (85.71%), Dantaharsa (69.23%), and Aniyamitaruja (85.71%). It provides better relief in Chalatra (66.66%), Srava (75.00%), and



Paka (60.00%) also, but very less patients having these complaints because of that statically insignificant.

## CONCLUSION

On the basis of the present study, following conclusions can be drawn.

- Krimidanta can be correlated with disease Dental caries.
- From the results and observation which were received from this study it can be concluded that Brihatyadi Taila Gandusha was provided better results in Dantasula, Durgandhya, Dantaharsa, Aniyamitruja, Sotha and Paka in Krimidanta.





## REFERENCES

1. Ambikadatt Shastri, Shusruta samhita, purvardh, Reprint (2007), Chaukhambha Sanskrit Sansthan, Varanasi, 2<sup>th</sup> volume, Nidana sthana PP. 294 - 303.
2. Sri Lalchandra vaidya, Ashtanga Hridayam with the commentaries 'Sarvangasundara' of Arunadatta, Reprint (2008), Motilal banarasidas publication delhi, 1<sup>st</sup> volume, PP.690-708.
3. Prof. P. V. Sharma, Drvyaguna Vijnana, 2<sup>nd</sup> Vouume, Reprint 2009, chhaukhambha bharti Academy, Varanasi, PP. 283 – 284, 58 – 62, 280 – 282, 804 - 806
4. Dr. V. B. Athavale, Dentistry in Ayurveda (Danta - Shastra), Chaukhambha Sanskrit Pratishthan, Delhi, PP. 50 -53.