



WELCOME  
TO

Ayurvedic Dental Care  
Danta Shastra / Vignyan  
AAPNA Academic Presentation  
Monday, April 19, 2010

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# Origin of Ayurveda & Dentistry



**Nimi** expert in surgery of mouth, throat, nose, ears, eyes, head (Shalakya Tantra / Nimi Tantra)

**Sushruta, Oupadhenava, Vaitrana, Ourabhra, Pushkalavata, Karaveerya, Gopurarakshita, Bhoja**

*The ancient, 5000 year old Sushruta samhita, had 1000 chapters, 100,000 verses. Presently the available Susruta samhita contains only about 12,000 verses.*

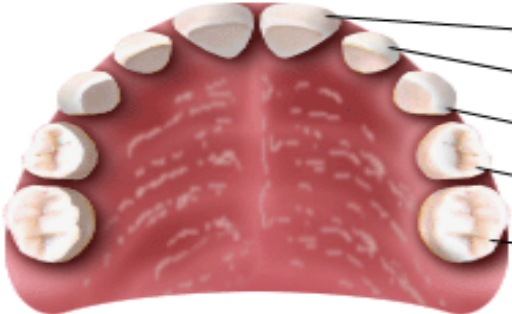

*Sushruta also narrated more than 125 various instruments for different surgical procedures, includes plastic surgery, orthopedics, ophthalmology, gynecology, neurosurgery, oral surgery*

# AYURVEDIC DENTAL CARE

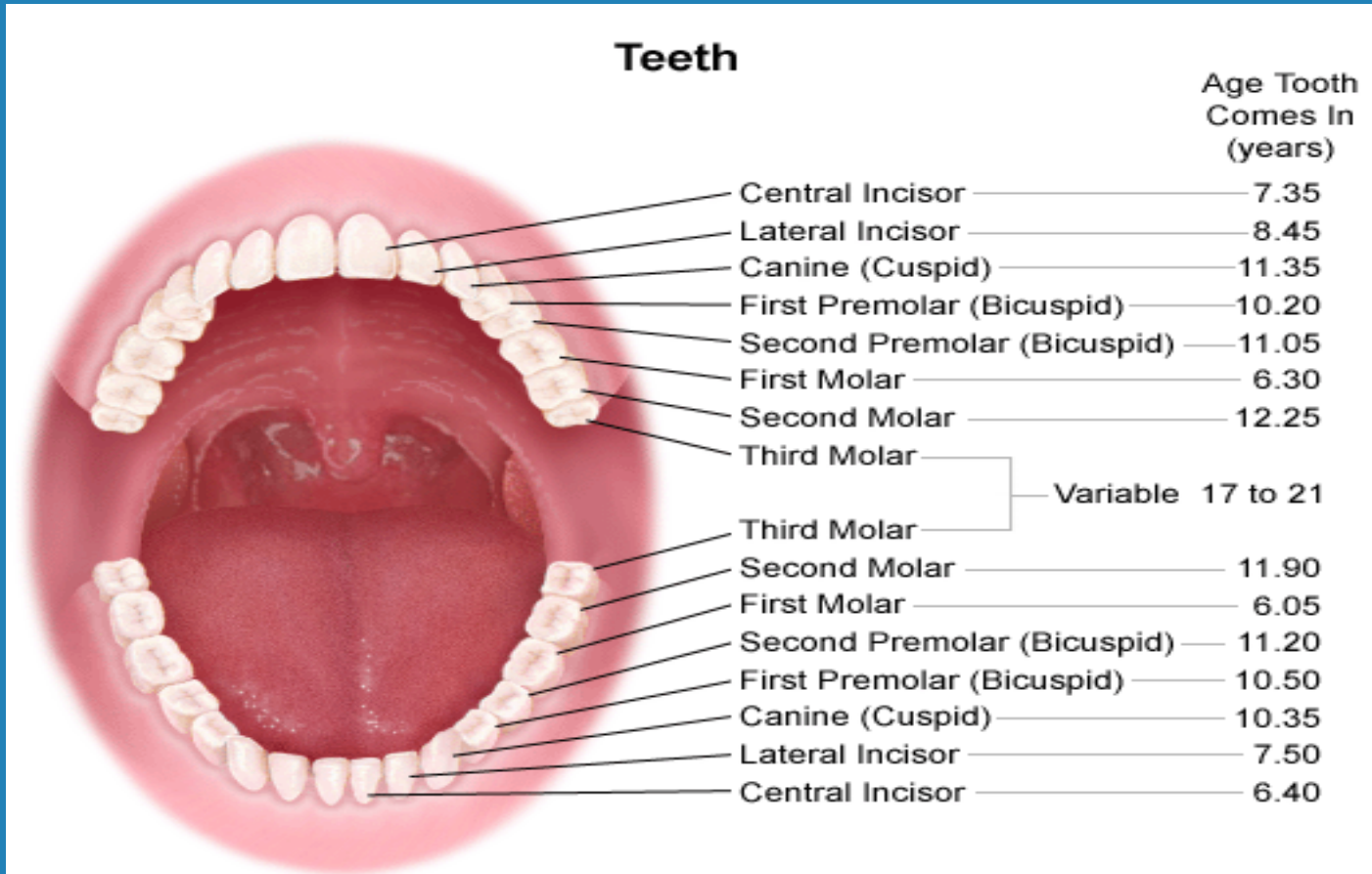
- ∞ Teeth in Ayurveda – Danta (Ruchaka – Asthi)
  - “Dantam Ashthyanam upadhatu” (Kashypa shareer)
- ∞ “Ruchaka” means imparts taste and “Asthi” means bone.
- ∞ 32 permanent teeth and 24 primary (deciduous) teeth. Now, children lost 4 deciduous teeth, leads them to have only 20 teeth
- ∞ Now, permanent teeth for adults varies from 28 – 32 (majority loose their wisdom teeth)
- ∞ The classification of teeth –
  - Central incisors (Raja danta), 2 each – total 4
  - lateral incisors (Vasta), 2 each – total 4
  - Canines / Cuspid (Damshttra) 2 each – total 4
  - Molars (Hanavya) 6 each – total 12

# Baby Teeth –

Photo Source - [www.lpch.org/media/images/conditions/ei\\_0043.gif](http://www.lpch.org/media/images/conditions/ei_0043.gif)

<b>Baby Teeth</b>		Age Tooth Comes In (months)	Age Tooth Is Lost (years)
<b>Upper Teeth</b>			
	Central Incisor	9.6	7.0
	Lateral Incisor	12.4	8.0
	Canine (Cuspid)	18.3	11.0
	First Molar	15.7	10.0
	Second Molar	26.2	10.5
<b>Lower Teeth</b>			
	Second Molar	26.0	11.0
	First Molar	15.1	10.0
	Canine (Cuspid)	18.2	9.5
	Lateral Incisor	11.5	7.0
	Central Incisor	7.8	6.0

# Adult – Teeth ( Photo Source [www.rush.edu/rumc/images/ei\\_0017.gif](http://www.rush.edu/rumc/images/ei_0017.gif))





# Healthy Teeth

∞ Normal healthy teeth are –

- Strong - Druda
- White – Sweta
- Dense – Sandra
- Smooth - Mrudu
- Clean – Soucha
- Slightly prominent - Vyakta
- well developed , evenly placed in relation to each other.



# Healthy Gums ...

∞ Normal healthy gums (danta mansa / danta vesta)

- Even
- Pink
- Smooth
- Strong
- Dense
- Steady

The diet and herbs good for bones, muscles are useful for teeth and gums.

# Hygiene & Health of Teeth (Danta Swasthya)

- ∞ Cleaning of teeth animals vs. humans.
- ∞ Animals eat more raw foods and humans eat high processed, easy foods.
- ∞ Brushing rotated over the gums and teeth in a vertical manner, example – from below upwards in the lower jaw and from above downwards in the upper jaw
- ∞ Never brush side to side brushing teeth, damage the neck of teeth and gums
- ∞ Rinse or gargle mouth properly and thoroughly after each food intake
- ∞ Gentle massage or gargle with plain sesame oil enhances strength of gums and teeth

# Use of herbs for brushing -

- ∞ Ayurvedic texts recommends to use herbal fresh stems of Arka (Calotropis), Nyagrodha (Banyan), Khadira (Acacia), Karanja (Pongamia), Arjuna (Termania a), Nimba (Azadaricta indica) etc.,
- ∞ Bitter, pungent, astringent tastes – removes excess bodhaka kapha in the mouth
- ∞ Vata Prakriti / vikriti – gums – thick, atrophic, dry, rough – use licorice , acacia (Sweet taste)
- ∞ Pitta Prakriti / Vikriti – gums - Spongy, inflamed - use Arjuna, Neem (Bitter taste)
- ∞ Kapha Prakriti / Vikriti – gums – Hypertrophic, pale, white – use Pongamia, Calatropis (Pungent taste)
- ∞ Rakta-Pitta Vikriti – gums – bleeding, spongy – Acacia (Astringent taste)



According to season change the herbal tooth / gum powders

Modern tooth brush was invented by Chinese in 1498

- ∞ Kapha – pitta – use Triphala, salt, honey
- ∞ Kapha – use Trikatu, salt, honey
- ∞ Healthy gums and teeth – use everyday massage with triphala with sesame oil



## ॐ General tooth powder for all:

- Equal portions of ginger, black pepper, pippali, cinnamon, cardamom, triphala, acacia catechu, saindhava lavana (rock salt), turmeric (haridra)

### ॐ **Benefits:**

- **Brushing removes food particles,**
- **Removes tartar (danta mala)**
- **Reduces mucus secretions of the mouth (bodhaka kapha)**
- **Improves freshness of breath**
- **Removes bad odor (halitosis)**
- **Keep the mind refreshed**

## Gargling (Gandoosha)

- ∞ Gargling should perform after brushing of teeth & right after each ingestion of food
- ∞ For gargling – cold or hot water, cold milk, sesame oil, coconut oil, triphala decoction, any herbal teas can be used
- ∞ Hot water gargling – helps to cleansing effect on entire oral cavity includes – teeth, gums, tongue, throat etc., and improves feeling of freshness.
- ∞ “*Asamcharyo mukhe poorne gandhooshaha, kavlo anyadha*” (Ashtanga Sangraha Sutra Sthana)
  - Gandhusha, taking large quantities of liquid into the mouth , unable to move the fluid inside the mouth.
  - Kavala - squishing or gargling and moving the fluid in the oral cavity. In this semisolid liquid is used.

Contra indications :

Unconscious state, poison condition, conjunctivitis, bleeding disorders of mouth, weak persons,



## Tongue Scraping – Jihwa Lekhana

- ∩ Ideal to use gold, silver, copper, stainless steel for the scraping of the tongue.
- ∩ Tongue scraping stimulate the reflex points of the tongue
- ∩ Removes bad odor (halitosis)
- ∩ Improve the sense of taste, stimulate the secretion of digestive enzymes
- ∩ Oral bacteria causes serious health problems including – cardiovascular disorders, heart attacks, strokes, lung problems, premature birth, low fetus weight, diabetes, osteoporosis of jaw, infertility in men.
- ∩ Removes millions of bacteria growth (approximately 500 varieties)
- ∩ Eliminate decaying food debris, Candida, dead cells from the surface of the teeth.
- ∩ 80-90 % of bad breath due to bacteria and fatty acids on the surface of the tongue.
- ∩ Research also shows that 5-20 % the bad odor originate from stomach, tonsils, decaying of food stuck between the teeth, gums or plaque deposited on the teeth.
- ∩ Clinical evidence shows that using of tongue scrapers on regular basis, has a significant improvement on eliminating anaerobic bacteria and decreases bad odor.



# Scientific Study On Sesame Oil Gargle

Dr. Mary Martha Stevens, Chairperson of the Dental Hygiene Department of Wichita State University, found that people who gargled with sesame oil daily had significantly lower ( $p < 0.001$ ) bacteria colony types in sub-gingival probe specimens (“The effects of a sesame oil mouth rinse on the number of oral bacteria colony types.”)

(Presented at the 11th International Symposium on Dental Hygiene, Ottawa, Canada, June 1989)

# Oil Pulling

*Efficacy of Oil Pulling on Oral Health Status* – A. SHARATH, J. JEEVARATHAN, M.S. MUTHU, V. RATHNAPRABHU, E. PAMELA, R. RAGHURAMAN, and G.S. CHAMUNDESWARI, Meenakshi Ammal Dental College & Hospital, Chennai, India

**Objectives:** The aim of the study was to assess the efficacy of an Indian folk remedy, oil pulling therapy using Sesame oil on oral health status

**Methods:** Randomized controlled triple blind clinical trials were done to evaluate the effect of Oil pulling therapy on

1. Dental caries - Streptococcus mutans count in plaque and saliva
2. Plaque induced gingivitis

The study and the control group included 10 subjects each. The subjects belonging to the study group were made to sip, suck and pull 10ml of sesame oil between their teeth for 10 minutes in the morning before brushing for 2 weeks. The control group subjects swished 10ml of 0.2% chlorhexidine mouthwash 30 minutes before tooth brushing for 2 weeks. Streptococcus mutans count was evaluated using the Dentocult SM Strip Mutans test. The assessment was repeated after 24 hours, 48 hours, 1 week and 2 weeks. Plaque induced gingivitis was assessed using both clinical (plaque and modified gingival indices) and microbial criteria (colony count of microorganisms). This assessment was repeated after 10 days



Results:

Study 1

1. Significant reduction in *S.mutans* count in oil group after 1 and 2 weeks ( $p = 0.01$ ;  $0.008$  respectively) and in chlorhexidine group in all time periods ( $p = 0.01$ ;  $0.04$ ;  $0.005$ ;  $0.005$ )
2. Significant difference in *S.mutans* count between the two groups after 1 and 2 weeks ( $p = 0.02$ ;  $0.002$  respectively)

Study 2

1. Significant reduction in plaque and modified gingival index scores in both study and control group ( $p = 0$  in both groups)
2. Reduction in colony count of microorganisms in plaque sample from both groups.

Conclusion: Oil pulling therapy, 5 to 6 times cost effective than chlorhexidine, can be used as an effective preventive home therapy in maintaining and improving oral health especially in developing countries like India.

# Diet for Oral Health (DFOH)

## ∞ Teeth –

- Favor – Cereals (wheat, barley), Pulses (black gram, garbanzo, moong), Milk & milk products (Ghee, butter, milk), Sweeteners (Jaggery, honey, sugarcane), Meat (deer, chicken, sparrow, peacock, horse, mutton soup, bone-marrow), Vegetables (Onion, eggplant, pumpkin), Fruits (Ripe mango, amalaki, pomegranate, dates), Spices (Garlic), Herbs (Arjuna, Yastimadhu)
- Avoid -Yogurt, lemon, lime, tamarind, sour fruits, mustard, cold water, dry and hard foods, excess starchy, sugary, highly processed foods.

## Gums –

Favor – Cereals (wheat, rice), Pulses (black gram, moong, sesame), Meat (deer, goat, chicken, sparrow), Milk products (Ghee), Fruits (Mango, amalaki, pomegranate, dates, jack fruit, banana, coconut, almonds, figs), Vegetables (Pumpkin, onion), Sweeteners (Jaggery, sugarcane, honey)

Avoid – Pungent, salty foods, drumsticks, garbanzo, eggplant, fish, raw mango

# Diseases of Teeth (Danta Rogas)

ॐ 5 types of Danta Rogas -

ॐ Anomalies of teeth

- Number of teeth – Danta Abhava (Absence of teeth / anodontia), Heena danta (weak or less number of teeth / partial anodontia), Adhikadanta (more number of teeth)
- Size of teeth – Vishaladanta (large teeth / megalodontia / macodontia or small teeth (microodontia)
- Placement of teeth – Viraladanta (lot of space between teeth), Karaladanta (irregular teeth), Vardhana or Adhidanta (supernumerary teeth)
- Color of teeth – (Vivarnadanta (discolored teeth), Shyavadanta (blackish, brownish teeth)

ॐ Traumatic

- Dantabhanga (fracture of teeth), Hanumoksha (dislocation of temporomandibular joint)

ॐ Malaja

- Dantasharkara (tartar), Kapalika (tartar with erosion of enamel)

ॐ Doshaja

- Danta shoola (toothache) Dalana / Sheetadanta (enamel erosion with sensitivity to cold), Dantaharsha (enamel erosion), Krumidanta (dental caries), Bhanjanaka (pathological fracture of teeth), Chaladanta (loose teeth / periodontitis), Asthyarbuda (tumors of bony tissue)

ॐ Manasika (psychological)

- Dantashabdha (grinding teeth), dantakadkadi (grinding of teeth with loud noise / bruxism)

## Diseases of gums and roots of teeth (Dantamoola Rogas)

- ∴ There are 16 varieties of danta moola rogas –
- Sheetada – Chronic suppurative recessive gingivitis
  - Danta pupputa – Periodontal abscess
  - Danta vesta – Chronic suppurative gingivitis
  - Soushira – Suppurative Periodontitis
  - Maha soushira – Necrotising ulcerative gingivo-stomatitis
  - Paridara – Atrophic gingivitis
  - Upakusha – Recurrent acute suppurative gingivitis
  - Vaidarbha – Injury to the gums
  - Khallivardhana – Atrophy and hypertrophy of gums
  - Adhimansa - Pericoronitis of wisdom teeth
  - Danta Nadi – 5 varieties - Alveolar abscess with sinus
  - Danta Vidradhi – Alveolar abscess

## Sheetada – Chronic suppurative recessive gingivitis

### ∞ Symptoms

- Sudden bleeding from gums
- Offensive odor
- Receding gums
- Due to vitiated Kapha and Rakta doshas

### Treatment –

1. Surgical incision to remove excess kapha and rakta by qualified dentist
2. Gargle with dasamoola decoction
3. Rubbing with herbal powder (pratisarana) – equal portions of musta, arjuna, triphala, ginger, honey
4. Local application of herbal paste Musta, Triphala, Turmeric, Manjishta
5. Nose drops – Triphala herbal oil

# Periodontal Abscess (Dantapupputa)

## ∞ Symptoms

- The pea shaped abscess forms around the gums , firm swelling, due to excess imbalance of kapha and rakta
- May spread to other teeth.
- Excruciating pain and tenderness
- Abscess goes to different stages - unripe, ripen, fully ripen stage

## Treatment

1. Blood letting by incision by qualified dentist
2. Application and gentle rubbing of Yastimadhu (licorice), turmeric, rocksalt, ginger
3. Nasya therapy

# Alveolar abscess (Danta Vidradhi)

## ∞ Symptoms:

- Swelling of gums with burning sensation
- Discharge of pus and blood on brushing
- Caries teeth and local trauma may cause
- All three doshas and rakta dosha involvement

## Treatment

1. Application of leeches to the gums
2. Local application of gums with powder of Kutki, Neem, Turmeric rubbed over the affected area
3. To remove excess pitta the decoction of punarnava, ginger, dasamoola, haritaki with castor oil
4. Abscess should be incised when it is completely ripe by the qualified dentist.
5. Diet - Favor – Ghee, oil, sugarcane, ginger, banana, soup of meat of animals, rice kanji, moong kanji.
6. Diet – Avoid – Dry, pungent, sour, salty, cold foods, leafy vegetables, yogurt, goat's milk, cold water, buttermilk, alcohol



## Chronic Atrophic Gingivitis ( Paridara)

### ∞ Symptoms –

- Receding of the gums
- Blood tint of saliva spitting
- Vitiated pitta, rakta, kapha doshas

### Treatment –

1. Follow the treatment protocol of Sheetada
2. Vomiting, purgation and nasya recommended
3. The rough surface of the leaves are used to mixture of herbal powder made with ginger, black pepper, pippali, rock salt, honey.



# Thanks to -

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∞ Resource :

- ∞ Dr. V.B. Athavale, MD and Vaidyacharya, and eminent author of several books. He has authored more than a dozen books on Ayurveda, for which has been conferred upon the International Award for the best author of Ayurvedic books in 1997.
- ∞ Dentistry in Ayurveda – Dr. V.B. Athavale, MD.