

HERBAL TREATMENTS FOR TOOTHACHE AND GUMS

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Abstract : It is well known that traditional medicinal herbs possess antibacterial activity against various microbes responsible for dental caries. Oral hygiene means prevention of oral infections and gum diseases. Various methods are used to make it hygienic. However, dental treatment is out of reach of the common man in developing countries. Although many drugs are available for oral treatments, they have many side effects like vomiting, diarrhea and tooth staining. Therefore, phytochemicals could be a very good alternative to chemical remedies. Now day's plants have been found to be safer and effective in oral hygiene.

Keywords: Herbal Treatments, Toothache and Gums, Amravati, Maharashtra.

INTRODUCTION

Tooth decay is the most important world health problem. It may impose negative impact on quality of human life. To reduce bacterial load, various aids are used. These chemical aids are becoming useless due to side effects like vomiting, diarrhea, tooth staining and increased bacterial resistance. Therefore, search for new formulations among the plant extracts has become mandatory (Adyanthaya et al., 2016).

It is well known that traditional medicinal herbs possess antibacterial activity against various microbes responsible for dental caries. Phytochemicals like tannins, terpenoids, flavonoids, alkaloids have been identified for treatment and maintenance of periodontal diseases. These phytochemicals could offer alternative drugs for prevention and treatment of various oral infections (Dash, 2014; Anushri et al., 2015).

The oral infections are caused by plaque forming bacteria and yeast. Oral hygiene means prevention of oral infections and gum diseases. Various methods are used to make it hygienic. However, dental treatment is out of reach of the common man in developing countries. Therefore, phytochemicals could be a very good alternative to chemical remedies. Now days plants have been found to be safer and effective in oral hygiene. Many plants are used to prepare herbal pastes and gels active against microbes, for e.g. Propolis (rich in flavonoids). Many essential oils-*Eucalyptus*, clove, cinnamon, are also used in toothpastes. Few plants are used in form of chewing gum to clean the teeths and to tighten them. Chewing gums reduce caries and mask bad mouth odour. Stems, vines and barks are used to clean teeths by placing it in mouth and chewing it vigorously (Bairwa et al., 2012; Bharadwaj and Bharadwaj, 2012; Sinha and Sinha, 2014). *Acorus calamus*, *Rumex crispus*, *Conchona officinalis*, *Vitis vinifera* are commonly used in many parts of the World for oral hygiene (Hardie et al., 1995).

METHODOLOGY

Warud is situated between 21°28'0"N 78°16'0"E and 21.46°N 78.26°E and has an agriculture-based economy. The average rainfall is around 900mm/annum. Soil is most, suitable for cotton and oranges. Light soil occurs all along the foot hills in the tahsil.

Ethnomedicinal survey of Warud tahsil in Amravati district of Maharashtra was carried out thoroughly during 2010-17. Total 62 local herbal healers were interviewed during the survey to collect the information regarding local name, medicinal uses of plants and methods of treatment. Plants were collected and identified with the help of available standard floras.

RESULTS AND DISCUSSION

Table I: Monoherbal treatments for toothache and gums.

Sr. No.	Botanical Name and Family	Local Name	Plant Part Used	Method of Treatment
1	Achyranthes aspera L. (Amaranthaceae)	Aghada	Root, stem	Teeths are brushed with root or stem.
2	Barleriaprionitis L. (Acanthaceae)	Pivalikoranti	Leaves	4-5 leaves are given to chew. Paste of leaves is kept near traumatic teeth to get relief from toothache.
3	Bauhinia variegata (L.) Benth. (Fabaceae)	Koylar	Stem bark	Bark powder is used as tooth powder. Bark extract is used as gargle to treat gums.
4	Butea monosperma (Lam.) Taub.	Palas	Petiole	Petiole is chewed in between painful teeths for some time.

	(Fabaceae)			
5	Calotropis procera (Ait.) R. Br. C. gigantia (L.) R. Br. (Asclepiadaceae)	Rui	Milky latex	Cotton, soaked in latex, is placed over decaying teeth. Saliva, secreted in mouth, is spitted out.
6	Careya arborea Roxb. (Lecythidaceae)	Kumbhi	Stem bark	Stem bark extract is used to wash mouth in bleeding gums & toothache.
7	Cassia fistula L. (Fabaceae)	Bahava	Fruit	Extract of fruits inner sticky pulp is used as mouth wash to treat gums.
8	Citrullus colocynthis (L.) Schrad. (Cucurbitaceae)	Kadu Indravan	Dried fruits	Coarse powder of dried fruits is burnt in cigar and fumes are kept in mouth for some time. Procedure is repeated till relief from toothache.
9	Gymnosporiamontana (Roth.) Benth. (Celastraceae)	Bharati	Leaves	Leaf paste is used as tooth-paste and also rubbed over gums.
10	Ipomoea pes-tigridis L. (Convolvulaceae)	-	Whole plant	Whole plant is burnt to ash. Ash is used as tooth powder.
11	Jatropha curcas L. (Euphorbiaceae)	Chandrajyoti	Branches	Branches are burnt to ash. Required amount of black salt is mixed with ash. Mixture is used as tooth powder.
12	Punica granatum L. (Lythraceae)	Anar	Epicarp	Shade dried epicarp is made into powder. 3- gm powder is given, two times per day, till relief.
13	Senegalia catechu (L. f.) P. J. H. Hurter & Mabb. (Fabaceae)	Khair	Branch	Teeths are brushed with branches to get relief from foul smell of mouth.
14	Solanum virginianum L. (Solanaceae)	Bhuidorli	Fruits	Dried fruits are burnt and decaying teeths are exposed to smoke.
15	Spilanthus calva DC. (Asteraceae)	Akkal-kadha	Floral heads	Floral heads are chewed to cure toothache.
16	Tribulus terrestris L. (Zygophyllaceae)	Sarata.	Whole plant	Whole plant extract is used as mouth wash to treat toothache and gums.
17	Tridax procumbens L. (Asteraceae)	Kambarmodi	Root	Piece of root is placed below painful teeth and chewed.
18	Vachellia leucophloea (Roxb.) Maslin, Seigler & Ebinger (Fabaceae)	Hivar	Insect galls	Insect galls, growing over the tree, are collected, dried and made into tooth-powder.

Table II: Polyherbal treatments for toothache and gums.

Sr. No.	POLYHERBAL TREATMENTS
1	Stem bark of <i>Acacia nilotica</i> 50 gm, flowers of <i>Zinnia elegans</i> 50 gm, curd and common salt- 20 gm each are crushed together to prepare the paste. Paste is applied on teeths at bed-time daily till relief.
2	100 gm leaves of <i>Barleriaprionitis</i> and 100 gm of <i>Spilanthus calva</i> together made to paste; paste is applied on bleeding gums till relief. Saliva is spitted out.
3	Stem bark of <i>Mimusopselengii</i> , <i>Embllica officinalis</i> and <i>Senegalia catechu</i> (100 gm of each) is boiled in 500 ml water till it reduces to 400 ml. Extract is used for mouth wash, 3-4 times a day.
4	2-3 fruits of <i>Piper nigrum</i> , 1-gm leaves of <i>Ocimum sanctum</i> and camphor together made to paste. Paste is applied on painful teeths.
5	Dried rhizome of <i>Zingiber officinale</i> , stem bark of <i>Celastruspaniculatus</i> and seeds of <i>Trachyspermumammi</i> , in equal amount, made into powder. Required amount of old jaggary is mixed with the powder and small tablets are prepared. One tablet is given every morning and evening till relief.
6	Stem bark of <i>Terminalia arjuna</i> and <i>Bombax ceiba</i> , in equal amount, is boiled in water. Extract is used as gargle for gum treatment.

Both, Monoherbal and polyherbal treatments are given in tabular form for the treatment of toothache and gums. In monoherbal treatment medicinal uses of 18 species, belonging to 13 families, are mentioned along with local names. In polyherbal treatment uses of 14 species is given in form of six different formulations. From this study it is clear that, in area under study,

traditional herbal treatments are still in use. Local tribal populations of Raj-Gond, Gond, Gawali, Thatya are practicing these age-old therapies for the treatments of toothache and gums.

Ethnobotanical studies are often significant in revealing locally important medicinal plant species and for the availability of crude drugs (Jain, 1981; Fransworth, 1998). Right from beginning, traditional knowledge about medicinal plants has provided many essential drugs of modern days (Pushpangadan and Kumar, 2005). However, new generations are unaware about these traditional treatments and lack knowledge regarding identification, collection, preservation and processing of the medicinal herbs. Therefore, documentation and conservation of such socially beneficial traditional practices is very necessary.

CONCLUSION

Plants offer an effective alternative for the treatment of various oral infections. They possess high benefit to low risk ratio. Recently peoples are paying much attention towards natural products for the treatment of diseases. Testing of safety and efficacy of herbal remedies is in infancy, but are expected to be used widely in future. Use of herbs for dental care is a very common indigenous system of medicine and must be incorporated in every-day life in form of pastes, pills, syrups and infusions. This will make dentistry safer, affordable and more accessible for economically lower sections of the society. Studies regarding safety and efficacy of herbal drugs should be carried out on priority basis

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