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Review Article

Herbs Therapies for Mouth Ulcer

Rutuja Jaiswal*, Tejaswini Dhawale, Dr. Gajanan Sanap

Late bhagirathi yashwantrao college of D&B pharmacy.

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ABSTRACT

Ulcer is a common disorder which is seen among many people. In most cases, it is an inflammatory skin rupture. There are many types of ulcers such as mouth ulcer, peptic ulcer, oesophagus ulcer, gastric ulcer. Among these mouth ulcers is common type of ulcer. Throughout the ages, treat a variety of illnesses and diseases. Mouth ulcers or aphthous ulcers are common oral lesions characterized by painful, shallow sores on the mucous membranes. This abstract explores the causes, symptoms, and potential treatments for mouth ulcers, emphasizing their impact on oral health and quality of life. Nowadays, herbal medicine is becoming a viable alternative treatment over the commercially available synthetic drugs on mouth ulcer treatment. Additionally, the abstract highlights the need for further research to enhance our understanding of mouth ulcers and improve therapeutic strategies for this prevalent oral condition.


INTRODUCTION

Traditional herbal medicines are naturally occurring plant-derived substances that have been used in local or regional healing therapy procedures with little or no industrial processing to cure illness. In the field of medicine, traditional herbal remedies are gaining popularity. In the treatment of SARS, traditional Chinese herbal therapy played a key role. Traditional herbal medicine is used by 80% of Africans, and the global annual demand in the treatment of SARS, traditional Chinese herbal therapy played a key role. Traditional herbal medicine is for these

treatments is estimated to reach \$60 billion. Many traditional herbal medicine studies will be evaluated by the global health community. Traditional herbal medicine research has been heavily funded by China, India, Nigeria, the United States of America (USA), and the World Health Organization (WHO) [1] A skin or mucous membrane ulcer is an open sore that is characterized by the sloughing off of [2]. Ulcers are lesions on the surface of the skin or a mucous membrane identified by a superficial loss of tissue. Therefore, oral hygiene is very important for Health. The tongue is the gastrointestinal tract's

*Corresponding Author: Rutuja Jaiswal

Address: Late bhagirathi yashwantrao college of D&B pharmacy.

Email : rutujajaiswal36@gmail.com

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(GIT) mirror. Mukhapak (Stomatitis), or mucous membrane inflammation, displays in cheek, tongue, and lips. These concerns are global in nature and impact all individuals [3]. Mouthy ulcers are sores on the inside lining of the mouth. Blisters or sores on the lips or around the outside of the mouth are usually cold [4]. Ulcers are lesions on the surface of the skin or a mucous membrane identified by a superficial loss of tissue. Therefore, oral hygiene is very important for Health. The tongue is the gastrointestinal tract's (GIT) mirror. Mukhapak (Stomatitis), or mucous membrane inflammation, displays in cheek, tongue, and lips. These concerns are global in nature and impact all individuals [5]. Furthermore, Indian folk medicine includes a variety of prescriptions for a variety of ailments, including wound healing, inflammation, skin infections, leprosy, diarrhea, scabies, venereal disease, ulcers of any kind, snake bites, and so forth. For various types of skin illness, more than 80% of the world's population still relies on traditional remedies. In order to facilitate the creation of a good environment for natural healing, herbal medicines in wound management include disinfection, debridement, surgical intervention, and maintaining a moist environment. Hence it is evident that herbal medicines are playing a major role in treatment strategies which are adopted global [6].

Symptoms:

#Pain is the primary sign of canker sores. The area of your mouth that has the canker sore may

area of your mouth that has the canker sore may also tingle, burn, or feel rough. Foods like bread crusts, acidic fruits, and spicy foods may harm the already irritated lining of the mouth and exacerbate the pain

#It may also ache more as a result of the movements your mouth makes when you chew or

talk. Round, white patches on the lips or within the cheeks are the appearance of canker sores.

#They may less frequently develop on the tongue, gums, or roof of the mouth. Typically, the sores have reddish, slightly raised edges, are somewhat sunken, and are only a few millimeters across.

#, Major This common type is also known as a minor canker sore canker sores occur when the patches are larger, measuring one to three millimeters. Herpetiform canker sores are known to exist in large numbers and are roughly the size of a pinhead [7].

Benefits of herbal medicine:

Herbal drugs operate as a reversible source, which is our only chance for constant supply of inexpensive medications for the world's rising population.

* The growth and processing of medicinal plants and herbal goods are environmentally benign and ecofriendly.

* Herbal medicine has contributed many of the most beneficial, useful, and diverse medications to contemporary medicine all around the world [8].

Causes of mouth ulcer:

- Other foods high in acidity or spice, citrus fruits.
- Burns from hot drinks or food
- Irritation from chemicals that are present in toothpaste or oral rinses.
- Chewing the insides of the cheeks or biting the tongue.
- Braces, poor-fitting dentures, and other instruments that may rub against the mouth and gum
- Medications including beta-blockers and pain killers
- Anxiety or stress.
- Some are the genetic factors [24].



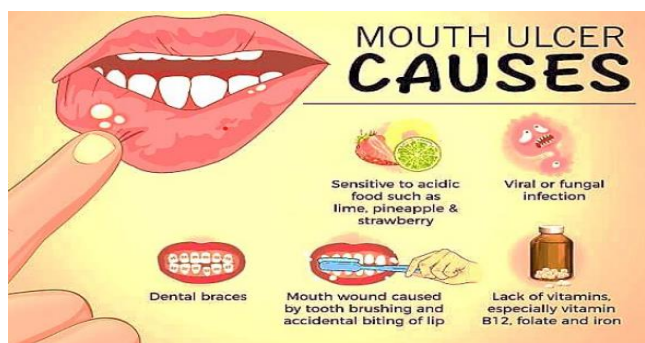
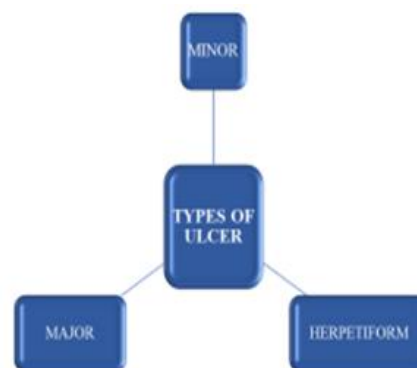


Figure 1: Etiology of Mouth Ulcer.

Etiology Of Mouth Ulcer:

1. **Stress:** Physiological instability and stress are linked to ulcers. It has been observed that patients with high levels of stress are more likely to develop ulcers. Antidepressant drugs therefore reduce the risk of ulcers.
2. **Hormonal changes:** Certain women may have oral alterations, such as bleeding gums and canker sores, as a result of hormonal fluctuations that occur during the menstrual cycle.
3. **Drugs:** Diclofenac is one example of a non-steroidal anti-inflammatory medicine medication and goes away when the medication is stopped.
4. **Allergies and Sensitivities:** Food allergies can result in Aphthous ulcers; they include allergy to chocolate, coffee, tomatoes, almonds, cheese, and peanuts.
5. **Genetic:** Genetic predisposition is the cause of serious ulceration. Family history contributes to ulcers in about 40% of cases.
6. **Mechanical injury:** Mechanical injury can occur due to local anesthetic injection, dental procedure, sharp teeth, Brush injuries and these are responsible for aphthous ulcers.
7. **Mechanical trauma:** Because of insufficient saliva and the development of RAS (recurrent aphthous stomatitis), which results from trauma and a failure to moisten and shield the oral mucosa.
8. **Deficiency of vitamin:** Low levels of iron, folic acid, and vitamin B12 can lead to RAS (Recurrent aphthous stomatitis). RAS expansion results from hematinic deficiency [9&10].

Types Of Ulcers



1. **Minor Ulcer:** Small round or oval ulcers known as mild canker sores.[11] These are usually ranging from 2 to 8 mm in diameter and may take up to 10 to 14 days to clear up. [12]



Figure 1: Minor ulcer.

2. **Major Ulcer:** Canker sores that are big in size and depth are larger, deeper and irregular borders, often 1cm or more. These uneven edges can take up to six weeks to repair. Long-term scarring is a risk with large mouth ulcers. [10&11]
3. **Herpetiform:** Herpetiform canker sores are small, cluster in groups of 10 to 100, and most commonly afflict adults. This type of mouth ulcer has irregular edges and will often heal without scarring within one to two weeks.[10&11]

Various Dosage Form used for the Treatment of Mouth Ulcers

- Pastes
- Mouthwashes
- Buccal tablet
- Buccal patch
- Medicated chewing gum
- Pharmaceutical Gel

1]pastes:

*Aloe vera gel paste:soothes pain and inflammation.*Neem paste:Antimicrobial properties

*turmeric paste[curcumin]:anti-inflammatory and antioxidant.

2]mouthwashes:

Antibacterial and antifungal mouthwashes

*Tea tree oil mouthwash: antimicrobial properties

*cinnamon mouthwash: antimicrobial properties

3]Buccal tablet:

*Ginger buccal tablets: anti-inflammatory properties

4]Buccal patch:

*chamomile patch: reduces inflammation and promotes healing

5]medicated chewing gum:

*Benzocaine: numbs pain

*lidocaine:numbs pain

*tea tree oil: antimicrobial properties

6]pharmaceutical gel:

1.oraljel gel:(benzocaine)

2.anbesol gel(lidocaine)

Anti-inflammatory gels: 1. Hydrocortisone gel, prednisolone gel

#Antimicrobial gels: 1. neomycin gel, metronidazole gel.

3. Herbal Treatment For Mouth Ulcer

Traditional herbalists and native healers have employed phytogetic substances to prevent and treat ulcers. [13,14]

Flavonoids (such as quercetin, naringin, silymarin, anthocyanosides, and sophoradin derivatives), saponins (from Panax japonicus and Kochia scoparia), tannins (from Linderacumbellatae), gums, and mucilages are some examples of botanical chemicals with anti-ulcer activity (i.e. gum guar and myrrh). Liquorice, aloe gel, and capsicum (chilli) have all been widely utilized as natural medications. Several plant extracts are used by [15&16]

Advantages of herbal medicines

*Herbal remedies have been used for a long time and are more widely accepted by the general public and patients.


*Medical plants have a reliable supply, allowing us to maintain consistent supply of less expensive medications for the world's expanding population.[17]






*Access to medicinal plants is not a barrier in developing nations like India because of its great agro-climatic, cultural, and ethnic richness.






* The growing and processing of therapeutic herbs is environmentally favorable.

* Herbal medication use is safe and effective even when used for a long time and seems to go unnoticed.[18].

Table1: list of Herbal Drugs Used in Mouth Ulcer.

Sr. No	Herbs	Portion And Part of Plant	Medicinal Properties	Chemical Constituent	Formulation	Reference
1	Turmeric (Curcuma longa) FamilyZingiberaceae	PortionDried  rhizome	Anti-inflammatory, Analgesic, Antiseptic, Anticarcinogenic,	Diarylheptanoid, curcumin, dimethoxy curcumin, and bisdemethoxycucumin	Mouthwash Powder/oil/mucoadhesive gel Curenex oral gel (Abbott	10,11,12

			Antioxidant, Antibacterial, Immunomodulatory		Pharmaceuticals	
2	Aloe vera (Aloe barbadensis miller) Family Liliaceae	Freshly purified leaf juice extract/ 	Wound healing, Anti-inflammatory, Antibacterial, Antifungal, Antioxidant, Antitumor, Immune boosting	Amino acids, anthraquinones, enzymes, minerals, vitamins, lignins, monosaccharide, polysaccharides,	Gel	10,11,13
3	Liquorice (Glycyrrhiza glabra) Family Fabaceae	Root extract 	Antithrombotic, Anti-inflammatory, Antioxidative, Antiallergenic, Antimicrobial, Antidiabetic	Saponin, flavonoid, liquiritin, isoliquertin, liquiritigenin and rhamnoliquirili	Bio adhesive discs Patch with extract Root/patche	10,11,13
4	Myrrh (Commiphora Myrrha) Family-Burseraceae	Extract 	Anti-inflammatory, Antioxidant, Antiseptic, Immune boosting	Terpenoids (monoterpenoid, sesquiterpenoids, and volatile/essential oil), diterpenoids, and steroids	Gel	11,15,16
5	Honey (Apis) Family Apidae	Gel/100% pure natural honey 	Antibacterial, Anti-inflammatory, Immune boosting, Antifungal	sugars (40% fructose, 30% glucose, and 10% maltose), oligosaccharides, minerals, carbohydrates, amino acids, vitamins, enzymes, and phytochemicals such as flavonoids, and ferulic and caffeic acids, and water	Honey and tulsice chip	11,15
6	Propolis (bee glue) Family Rhytismataceae	Beewax/ resin 	Anti-inflammatory, Antioxidant, Immunostimulant, Wound healing, Antibacterial, Antiviral, Antifungal, Antitumor	Resin, oil and wax, pollen) and amino acids, minerals, sugars, vitamins B, C and E, flavonoids, phenol, terpenes.	Oromucodhesive films /Capsule/paste	11,17

7	Lady mantle (Alchemilla vulgaris) FamilyRosaceae	Extract + 	glycerin	cis-3-hexenol, linalool, oct-1-en-3-ol and nonanal, followed by myrtenol, hexadecanoic acid, cis-3-hexenyl acetate and alpha-terpineol	3% Aphtarine gel	11
8	Guava (Psidium guajava) FamilyMyrtaceae	Leaves 	Antioxidant, Antibacterial, Anti-inflammatory, Anticancer, Antifungal, Antimicrobial, Antitumor, Antiallergic, Antihyperglycemic, Antimutagenic	isopropyl alcohol, menthol, alpha-pinene, terphenyl acetate, limonene, beta-pinene, caryophyllene, and beta-bisabolene. Oleanolic acid	Leaves/powder/gel/guava leaves mouthwash	11,23
9	Chamomilla (Matricaria Chamomilla) FamilyDaisy	Fluid extract 	Anti-inflammatory, Antibacterial, Antifungal, Antiviral, Analgesic, Antispasmodic, Smooth musclerelaxing action	Chamazulene, alpha-bisabolol oxide A, alpha-bisabolol oxide B, alpha-bisabolone oxide A, beta-bisabolene, beta-farnesene, alpha-farnesene	Tincture, mouthwash, Ointment, Strong tea made from chamomile flowers	11,10
10	Tulsi (Ocimum sanctum/holy basil) FamilyMints	Extract 	Anti-inflammatory, Antioxidant, Antibacterial, Immunomodulatory, Analgesic, Anticancer, Antiasthmatic, Antidiabetic, Hepatoprotective	Methyl eugenol, cyclooctene, Eugenol, bornyl acetate, camphor, Methyl eugenol, beta caryophyllene	Honey and tulsi ice chip	11
11	Ginger (Zingiber officinale) Familyzingiberaceae	Ginger's Alcoholic Extract. 	Anti-inflammatory, Antinausea, Digestion aid, Antioxidant, Metabolis	alpha-zingiberene, beta-bisabolene, gingerols and shogaols	Mucoadhesive Base	

13.MINT: Mint, also known as Menth, is a member of the Lamiaceae (Labiatae) family and contains vitamins A, C, iron, calcium, and magnesium. Mint leaves are applied to mouth ulcers to provide a cooling effect, reduce pain from the ulcer, and provide fragrance in the mouth. Mint has antibacterial, antimicrobial, and fresh breath properties, as well as a cooling effect.[19]



8. Jasmine:

Jasmine Grandiflorum is a type of jasmine found primarily in Asia, Africa, Australia, and India. It belongs to the Oleaceae family. Jasmine Grandiflorum has healing properties in all of its components, and it has been used in traditional medicine for this purpose. This plant promotes the initial inflammation and epithelization phase, which speeds up wound healing due to its antioxidant properties. When the leaves of Jasmine Grandiflorum are extracted with alcohol, they have antioxidant and anti-ulcer properties. The leaves contain ascorbic acid, salicylic acid, and glucoside. [20]



CONCLUSION:

Oral ulceration is a common problem in the oral cavity. Mostly it is benign. Some oral ulcers may be associated with systemic disorders. Patients with an ulcer that persists for more than three weeks should be referred; suspected. Chronic

ulcer requires urgent referral to a specialist. The diagnosis of oral ulceration is based on patient history and clinical appearance of ulcers. The diagnosis of oral ulcerative lesions might be quite challenging. This narrative review article aims to introduce an updated decision tree of oral ulcerative lesions based on their diagnostic features and also an overview of oral ulcer. The diverse range of herbs discussed in this article, such as Liquor ice, aloe vera, turmeric, and guava, showcase promising antiulcer properties through their ability to modulate various physiological and biochemical pathways involved in ulcer formation. The evidence presented suggests that these herbs exert their effects by enhancing mucosal defense mechanisms, and mitigating oxidative stress. Additionally, their anti-inflammatory and antimicrobial properties contribute to a multifaceted approach in addressing the complex etiology of ulcers. Herbal remedies, with their potential to complement conventional therapies, offer a promising avenue for the development of alternative and integrative approaches to ulcer management. However, it is crucial for healthcare practitioners to exercise caution and ensure evidence-based practice when incorporating herbal interventions into treatment plans. Overall, the comprehensive exploration of herbs with antiulcer activity in this review highlights their potential as valuable additions to the armamentarium of therapeutic options for individuals suffering from ulcer-related conditions

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