Review Article

Quest for the Best Cure: A Comparative Literature Review of Dry Socket Treatment Modalities

Snigdha Singh, Somya S Shrivastava, Ojasvi Sharma
Department of Oral Surgery, Subharti Dental College & Hospital, Swami Vivekanand Subharti University, Subhartipuram, Delhi, Hariwar (Uttar Pradesh)

ABSTRACT:

Dry socket, also known as alveolar osteitis, is one of the few common complications occurring after dental extraction wherein, sharp shooting pain, disintegrated clot formation, and delayed healing is observed. Despite extensive research, an optimal standardized treatment remains elusive owing to its multifactorial etiology such as, traumatic extractions, clot dislodgement, tobacco use, and microbial activity. A comparative analysis of 15 clinical studies was conducted to gauge the efficacy of different modalities with respect to pain relief and wound healing. This review aims to explore the different management techniques, ranging from traditional and conventional approaches such as honey/turmeric application, medicated dressings with eugenol to emerging regenerative treatments like low-level laser therapy and platelet-rich fibrin.

KEY WORDS: Dental extractions, Alveolar osteitis, Dry socket, Socket healing, Post extraction complications

Address for correspondence : Dr. Ojasvi Sharma, 6/77, Vineet Khand, Gomti Nagar, Lucknow-226010 (Uttar Pradesh), India,
E-mail: ojasvi23june@gmail.com
Submitted: 20.02.2025, **Accepted:** 29.05.2025, **Published:** 06.06.2025

INTRODUCTION:

After tooth extraction, formation of a stable blood clot in the socket is important for healing. Some of the most common complications occurring post extraction is Localized alveolitis, also commonly called Localized Alveolar Osteitis or Fibrinolytic Alveolitis or simply Dry Socket[1]. Blum has described it as "post-operative pain in and around the extraction site, which increases in severity at any time between one and three days after the extraction, accompanied by a partially or totally disintegrated blood clot within the alveolar socket, with or without halitosis" [2].

In addition to accumulation of debris and a disintegrating clot in the newly removed socket, which may or may not result in malodour, the patient with dry socket suffers from excruciating throbbing pain[3]. Following regular dental extractions, the chances of occurrence of dry socket is between 1 and 4% [4,5], although it can increase to 30% when impacted mandibular third molars are surgically removed[5,6].

There are multiple possible etiological factors leading to dry socket. One of it may be the early dislodgment of blood clot from extraction site, traumatic surgical extractions, secondary infections, mechanical dislodgement of clot due to patient negligence or ignorance, decreased vascularity in the area,tobacco use and consuming oral contraceptive pills[3]. Increased local fibrinolysis at the socket is another possible reason for alveolar osteitis[7].

Birn, considered that "the trauma resulting from extraction, as well as aggressive curettage, might harm the alveolar bone cells, leading to inflammation of the alveolar osseous medulla and release of cell mediators to the alveolus, where they cause fibrinolytic activity, increasing the risk of dry socket"[8].

An association between the etiology of Alveolar Osteitis and the presence of aerobic bacteria was suggested by Nitzan et al. in 1978. Additionally,

Access this article online

Quick Response Code:

Website: www.pjsr.org

DOI: https://doi.org/10.5281/zenodo.15637733

How to cite this article: Singh S, Shrivastava SS, Sharma O. Quest for the Best Cure: A Comparative Literature Review of Dry Socket Treatment Modalities . PJSR. 2025;18(1):78-93.

they noted that cultures of anaerobic Treponema-denticola, a pioneering bacterial species implicated in a number of periodontal disorders, exhibited strong fibrinolytic activity[9].

Dueto its complex etiology and lack of understanding, a variety of therapeutic modalities have been linked by dental professionals for the management of dry socket, with differing degrees of efficacy. Dry socket therapy has never proven effective to date, and patients experience discomfort and a slow rate of healing from socket wounds. The treatment of dry socket is not standardized, and many dental clinics frequently omit its preventive guidelines[10].

Managing dry socket aims to alleviate pain and promote healing[11]. Treatment modalities range from conservative to more interventional approaches. Initial management often involves irrigating the affected socket to remove debris and applying medicaments containing pain-relieving agents like eugenol or local anesthetics[11,12].

If pain persists, stronger analgesics may be prescribed. More recently, laser therapy has surfaced as a prospective cure, aiming to stimulate healing and reduce inflammation[10]. Platelet-rich plasma (PRP) application, which utilizes the patient's own growth factors, is another emerging technique that may accelerate tissue regeneration and reduce healing time[13]. The severity and the clinician's assessment usually determineafavorable treatment option to cure dry socket.

Despite being one of the most prevalent and well-known post-extraction challenges, dry socket, with a history spanning almost a century, a definitive standardization for its treatment is still lacking. Therefore, this review aims to compare the various modalities used in treating dry socket and provide clinicians with a comprehensive overview of these approaches for more favorable and efficient management of this condition.

Search strategy-

Using internet databases like PubMed, Scopus, Web of Science, and Google Scholar, a comprehensive literature search was conducted to locate pertinent papers on the management of dry socket. The articles published between 2014 and 2025 were the focus of the search. The following Boolean operators and keywords were applied:

"dry socket treatment", "alveolar osteitis management", "zinc oxide eugenol" ,"Alvogyl" , "low-level laser therapy", "platelet-rich fibrin", "dry socket pain management" and "healing outcomes".

Inclusion and Exclusion Criteria-

Inclusion criteria:

- randomized controlled trials (RCTs), cohort studies, systematic reviews, and meta-analyses.
- articles that compare two or more dry socket treatment options.
- Articles written in English from peer- reviewed journals.
- studies focused on the clinical efficacy, healing duration, and pain alleviation of various therapies.

Exclusion criteria:

- Case reports, expert opinions, and editorials.
- Studies involving patients with systemic conditions affecting wound healing (e.g., diabetes, immunosuppression).
- Non-English publications without accessible translations.

Study Selection and Data Extraction

The initial database search yielded 325 articles, which were searched for relevance based on titles and abstracts. After application of inclusion and exclusion criteria, 15 studies were selected for full-text review and comparative analysis. The extracted data included:

- Treatment modalities compared (e.g., ZOE, Alvogyl, PRF, LLLT, herbal remedies).
- Pain relief outcomes (measured using pain scales such as VAS).
- Healing duration and formation of granulation tissue.
- Advantages and disadvantages of each method.

DISCUSSION:

Dry socket, also termed as Alveolar osteitis is a painful condition seen 3-4 days after a dental extraction. It is a prevalent post operative complication of this surgical procedure often due to a multiplefactors. The etiology of dry socket is complex and multifaceted with leading causes like dislodgement of blood clot, traumatic extraction, lack of postoperative care, tobacco smoking, poor oral hygiene, use of oral contraceptives pills and even nutritional deficiencies.

Dry socket appears as an empty wound with disintegrated blood clot, debris and exposed bone. It may have a purulent sloughing along with putrid odour. Patients show extreme radiating pain and discomfort

with the site being tender on touch, warm and erythematous. Some may even show localized lymphadenopathy, trismus and swelling.[3,4]

As the saying goes, "Prevention is better than cure", preventing dry socket should be the priority. This can be done so by avoiding vigorous rinsing, forceful spitting, tobacco smoking and practicing good oral hygiene habits. Patients must be sensitized with post operative care protocol. Suturing the wound, prescribing antibiotics, analgesic and anti-inflammatory can help improve the condition.

As it is a very common condition occurring in the dental practice, several conventional and modern treatment strategies and approaches have been explored for a better prognosis of this condition. Treatment aims to alleviate pain and swelling, promote healing of the site and prevent secondary infections which can be a breeding ground for further decay. Conventional approaches include irrigation of the socket, application of a medicated Zinc oxide eugenol dressing or Alvogyl. Herbal remedies like honey and turmeric have gained popularity for its anti-inflammatory properties. Newer modalities like Platelet rich fibrin (PRF), Low level laser therapy (LLLT) and Concentrated growth factor (CGF).

The aim of this literature review revolves around providing an efficient and comfortable solution to a problem which occurs day to day in a dental clinic. From traditional methods like using turmeric and honey to conventional modalities like applying ZOE and Alvogyl dressings to newer regenerative techniques like PRF, CGF and LLLT, numerous studies have been done to deduce the absolute solution to cure dry socket.

Based on the findings from the reviewed studies, these treatment modalities have been assessed for their efficacy in pain relief and healing. 'Alvogyl has demonstrated effectiveness in providing immediate pain relief", as observed in studies by Faizel et al.[14] and Supe et al[15]. However, Neocone was found to offer the fastest healing and long-term pain relief[14]. Ozone-infused olive oil, studied by Khan et al. (2015) [16], showed quicker pain relief compared to Alvogyl. LLLT was found to be more effective than Alvogyl for sustained pain reduction' in few studues[17,18,19]. The use of turmeric and mustard oil as a dressing significantly improved healing outcomes compared to zinc oxide eugenol (ZOE), as demonstrated by Lone et al[20].

Honey also exhibited strong anti-inflammatory properties and enhanced granulation tissue formation (Ansari et al.; Khan et al)[21,22].

"Antibiotic irrigation with clindamycin was found to be more effective than saline or rifampicin for reducing pain in 1 study[23]. Photobiomodulation therapy, studied by Shatha S, et al, improved healing outcomes when combined with Alvogyl.[24]

Advanced regenerative approaches such as concentrated growth factor (CGF) (Kamal et al)[19] and platelet-rich fibrin (PRF) (Bibi et al) [25] accelerated healing and reduced post-operative pain. Finally, re-establishing a blood clot in the socket was found to be more effective than ZOE dressing for pain control and patient satisfaction (Manzooret al)[26]. While conventional treatments like Alvogyl and ZOE remain commonly used, emerging therapies such as PRF, CGF, and laser therapy show promise in improving patient outcomes. Further clinical trials are necessary to establish standardized treatment protocols for optimal dry socket management.

Table 1. A summarized review of the methods, results and conclusion of all the 15 shortlisted articles in a structured format. Table 2. An insight on the advantages and disadvantages of the materials mentioned in the stated studies.

CONCLUSION:

Dry socket remains a challenging post-extraction complication, with no universally accepted treatment protocol. This review highlights the comparative effectiveness of various management approaches, ranging from conventional methods like ZOE and Alvogyl to more advanced techniques such as CGF, LLLT and PRF.

While traditional treatments provide symptomatic relief, newer regenerative therapies show promising results in accelerating healing and reducing pain. Herbal remedies like turmeric and honey have also demonstrated efficacy, offering alternative approaches with minimal side effects. Given the variability in treatment outcomes, further large-scale clinical trials are needed to establish standardized guidelines for optimal dry socket management. A multidisciplinary approach integrating both conventional and modern techniques may offer the best patient outcomes in the future.

Financial Support and Sponsorship

Nil.

Table 1: Summary of studies and the treatment modality used for resolving dry socket in a healthy patient.

S no.	Title of study/Author/Year	Type of study	Number of patients	Methodology	Results/conclusion of the study
1.	Comparison Between Neocone, Alvogyl and Zinc Oxide Eugenol (ZOE) Packing for the Treatment of Dry Socket: A Double Blind Randomised Control Trial. SayedFaizel et al. 2014 [14]	Double blind randomized control trial	105	Patients diagnosed with dry socket were randomly distributed into three groups. 1) Group A- Alvogyl, 2) Group B- Zinc oxide eugenol (ZOE) 3) Group C- Neocone. decreased pain and wound healing was observed and compared up till the 10th day.	Alvogyl provided initial pain relief as compared to Neocone. While Neocone was slow to act first, it proved as the most superior material due to its property of complete pain relief, faster healing, less dressing changes and fewer visits.
2.	Management of dry socket using Ozone gel vs. Alvogyl – prospective clinical trial. AnumRehman Khan et al. 2015 [16]	Prospective clinical trial	10	Ten patients with dry socket were enrolled, five receiving ozone-infused olive oil and five receiving Alvogyl as a control. The ozone oil was administered similarly to Alvogyl, being placed into the socket after irrigation and debridement. Patients were followed up after two days.	Ozone infused olive oil appeared to promote quicker pain relief for dry socket as comparedto Alvogyl.
3.	Comparison of the effect of low level laser therapy with alvogyl on the management of alveolar osteitis. Eshghpour M et al. 2015 [17]	Prospective randomized clinical trial.	60	Sixty patients with alveolar osteitis were randomly split into three groups. 1) Group 1: Alvogyl 2) Group 2: Low-power red laser therapy (660nm, 200mW, 6J per area) for three days. 3) Group 3: Low-power infrared laser therapy (810nm, 200mW, 6J per area) for three days.	Alvogyl provided better immediate pain relief for dry socket than either red or infrared laser therapy. However, on day 2 and throughout day 3, the red (660nm) laser proved more effective than Alvogyl. The infrared (810nm) laser showed some pain reduction but was less effective than both Alvogyl and the red laser at all time points.

S no.	Title of study/Author/Year	Type of study	Number of patients	Methodology	Results/conclusion of the study
4.	Role of turmeric in management of alveolar osteitis (dry socket): A randomized clinical study. PA Lone et al. 2018 [20]	A randomized clinical study	178	One hundred seventy-eight patients with dry socket were selected for the study. 1) Group A received a turmeric and mustard oil dressing, while 2) Group B received a zinc oxide eugenol (ZOE) dressing.	Faster granulation tissue formation showcasing wound healing and relief from pain was observed in patients who were given turmeric (Group A) as a medicament for dry socket.
5.	Efficacy of Alvogyl (Combination of Iodoform + Butylparaminobenzoate) and Zinc Oxide Eugenol for Dry Socket. Supe, Narendra B.; Choudhary, Sneha ,; Yamyar, Sheetal ; Patil, Kuldeep ; Choudhary, Amit Kumar; Kadam, Vishwas2018 [15]	Single-blinded prospective study	50	Fifty people with dry socket were randomly assigned into two treatment groups: 1) Group I: Alvogyl 2) Group II: zinc oxide eugenol dressing.	Alvogyl was a more effective treatment for dry socket than zinc oxide eugenol, leading to faster pain relief and quicker healing.
6.	A Study to Evaluate the Efficacy of Honey in the Management of Dry Socket Ansari, Arsalan; Joshi, Sanjay; Garad, Aarti; Mhatre, Bhupendra; Bagade, Sachin; Jain, Rushika. 2019 [21]]	prospective study	50	Fifty patients diagnosed with dry socket were selected. Honey was used as a medicament over the period of one week.	The honey dressing led to significant reductions in inflammation, hyperemia, and improved mucosal edges, resulting in decreased pain and discomfort. No adverse reactions were observed.. Distance between the mucosal edges had significantly reduced over the duration of this study

S no.	Title of study/Author/Year	Type of study	Number of patients	Methodology	Results/conclusion of the study
7.	Evaluation of the effects of intra-alveolar irrigation with clindamycin, rifampicin and sterile saline in alveolar osteitis treatment Çebi AT. 2020 [23]	Clinical comparative prospective study	54	Fifty-four patients were distributed into three treatment groups . 1) Group A received sterile saline irrigation, 2) Group B received rifampicin irrigation, and 3) Group C received clindamycin irrigation.	Clindamycin irrigation seemed to lessen the pain due to dry socket more effectively than rifampicin or sterile saline irrigation.
8.	The Efficacy of Concentrated Growth (CGF) Factor in the Healing of Alveolar Osteitis: A Clinical Study. Aqsa Kamal et al. 2020 [27]	Longitudinal cohort study	40	Patients were divided in two groups and the healing along with pain relief was observed on the fourth, seventh and fourteenth day. Control group consisted of patients who received the standard treatment protocol for dry socket i.e saline irrigation and curettage. The test group received placement of CGF gel in the socket .	CGF showed superior results when compared to standard treatment in terms of healing and pain reduction.
9.	Management of dry socket with low-level laser therapy. Aqsa Kamal et al.2020[18]	Longitudinal Cohort Study.	45	45 patients with dry socket were studied. 1)Group one received standard dry socket treatment, 2)Group two received low-level laser therapy (LLLT) at 200mW, 6J, continuous wave. Pain and healing were measured at the start, and then four and seven days later.	Low-level laser therapy (LLLT) appears to be more effective than the standard treatment for dry socket, leading to better pain management and faster healing within the span of 7 days .

S no.	Title of study/Author/Year	Type of study	Number of patients	Methodology	Results/conclusion of the study
10.	A Comparative Clinical Study between Concentrated Growth Factor and Low-Level Laser Therapy in the Management of Dry Socket. Aqsa Kamal et al. 2020 [19]	Longitudinal Cohort Study	60	Sixty dry socket patients were assigned to three groups: 1. Group 1- standard treatment (curettage and saline irrigation), 2. Group 2- CGF treatment 3. Group 3- LLLT. Patients were evaluated at baseline, and then on the 4th, 7th, 14th and 21st day for pain, inflammation, tenderness, and granulation tissue.	The group provided with the standard treatment took longer than 7 days to achieve healing stage as compared to CGF and LLLT groups. Comparing CGF and LLLT, the LLLT group displayed a 4-day delay in both granulation tissue formation and pain relief compared to the CGF group.
11.	A Comparative Study to Evaluate the Effect of Honey and Zinc Oxide Eugenol Dressing for the Treatment of Dry Socket: A Double-Blind Randomized Controlled Trial. *Appl. Sci.* Khan, Z.A.; Prabhu, N.; Ahmed, N.; Lal, A.; Issrani, R.; Maqsood, A.; Alam, M.K.; Alanazi, S.; Aljohani, F.M.; Almndel, M.N.; et al. 2021 [22]	Double-blind randomized controlled trial	90	Ninety patients with dry socket were assigned to three groups of 30 each: 1) Group 1 received honey treatment, 2) Group 2 received zinc oxide eugenol, 3) Group 3 served as the control. Pain scores were measured by a verbal rating scale before and after treatment at various time intervals	Both group 1 and 2 reduced immediate pain levels in dry socket patients compared to group 3.
12.	Comparing The Effectiveness Of Chlorhexidine Gel And Metronidazole Gel In Management Of Dry Socket J Jayaindhraeswaran,SenthilNathan ,Arun. 2021 [28]	In vivo, single blind ,randomised control through comparative protective study	30	Thirty participants with alveolar osteitis were divided in two groups of 15. 1) Group 1: chlorhexidine gel 2) Group 2: metronidazole gel. Patients were recalled on the third and seventh day.	Metronidazole gel led to noticeable improvements in mouth opening and reduced swelling compared to chlorhexidine. It was also more efficacious in reducing post-extraction pain.

S no.	Title of study/Author/Year	Type of study	Number of patients	Methodology	Results/conclusion of the study
13.	Photobiomodulation for Managing "Dry Socket": A Randomised Controlled Trial.Shatha S. ALHarthi a, Dena Ali b, NujudZayedAlamry a, Majed K. Alshehri c d, Darshan D. Divakar e f,Munerah S. BinShabaib . 2022.[24]	Randomised control trail	55	Patients with dry socket were randomly divided into 4 groups. 1) Group 1: curettage and saline irrigation 2) Group 2: curettage and Alvogyl dressings changed every 48 hours . 3) Group 3: curettage, Alvogyl, and photobiomodulation therapy (660nm diode laser). 4) Group 4: only photobiomodulation therapy.	In dry socket patients, combining photobiomodulation therapy with curettage and Alvogyl dressing appeared to be more effective for postoperative pain reduction and healing than curettage alone, or curettage with Alvogyl dressing.
14.	Outcome Of Re-Establishment Of Blood Clot And Zinc Oxide Eugenol Dressing For Management Of Dry Socket In Terms Of Pair. Manzoor, S., Khan, M. ., Shakeel, S. ., Ullah, A. ., & Ahmad, T. . 2024 [26]	Cross sectional study	72	Seventy-two patients diagnosed with dry socket were distributed in two groups . One group of 36 patients received standard treatment followed by induced bleeding in the socket. The second group of 36 patients received normal saline irrigation followed by zinc oxide eugenol placement in the socket.	Re-establishing a blood clot proved to be a superior treatment option compared to zinc oxide eugenol dressing for managing dry socket as It resulted in better pain control, fewer required dental visits, greater patient satisfaction, and lower cost.
15.	Effectiveness of Platelet Rich Fibrin in the Management of Pa in and Healing of Dry Socke. HaleemaBibi, ZarnabRizwan, GhinaRizwan, Syed Hamza Zia. 2025[25]	Case report	1	PRF was placed on the exposed bone and secured with sutures. Granulation tissue and pain, with the help of VAS scale was used to assess healing on the 1st, 3rd,7th and 10th day.	There was no pain on the 7th day and socket walls had been covered by the 10th day

S no.	Title of study/Author/Year	Type of study	Number of patients	Methodology	Results/conclusion of the study
16	Comparative evaluation of zinc oxide eugenol versus gelatin sponge soaked in plasma rich in growth factor in the treatment of dry socket Pal, U.S.; Singh, BalendraPrataɟ; Verma, Vikas [29]	Comparative study	45	The subjects were divided into groups of 3 1) Group A was treated with plasma rich in growth factor dipped in gelatin sponge . 2) Group B was treated with zinc oxide eugenol 3) Group C was treated by plain saline irrigation.	Gelatin sponges soaked with plasma rich in growth factor showed much better healing as compared to both group B and C, however in case of pain management after 15 days no significant difference was found between group A and B.
17	Role of Mercurochrome and Chloromycetin in the Management of Dry Socke: A Clinical Study With a New Approacl. Ashok Bansal , Shivani Jain ,Srimathy Arora ,Shipra Gupta [30]	Prospective clinical trial	50	A group of 50 patients diagnosed with dry socket were administered a combination pack of chloromycetin and mercurochrome.	The combination pack led to excellent healing and pain management in most of the patients on the first day itself
18	The Effectiveness of GECB Pastille in Reducing Complications of Dry Socket Syndrome Abbas Haghighat, Rahim BahriNajafi, ostafaBazvand,HamidBadrian, NavidKhalighinejad, HosseinGoroohi [31]	Randomised clinical trial	30	The patients were divided into two groups of 15 each 1. First group was given ZOE dressing 2. And on the second group pastille GECB was used.	The patients administered with GECB pastille exhibited far better results both in case of healing and pain relief as compared to ZOE dressing .

S no.	Title of study/Author/Year	Type of study	Number of patients	Methodology	Results/conclusion of the study
19.	The Efficacy of a Topical Anesthetic Gel in the Relief of Pain Associated With Localized Alveolar Osteitis Corey C. Burgoyne,DMD,* James A. Giglio, DDS, MEd, Sarah E. Reese, BS, Adam P. Sima, MA,§ and Daniel M. Laskin , DDS, MS [32]	Prospective randomized clinical study	35	The patients were divided into a control group and test group. 1. The control group received the standard treatment which is ZOE with gauge. 2. The test group received a gel composed of 2.5% lidocaine and 2.5% prilocaine	The patients in the test groups reported better pain control as compared to the control group.
20.	Comparison of Alvogyl, SaliCept Patch, and Low-Level Laser Therapy in the Management of Alveolar OsteitisGökselS¸ims¸ek Kaya, DDS, PhD, GünayYapici, ZeynepSava¸, andMetinGüngörmüs¸, [33]	Randomized Prospective clinical trial	104	Randomly assigned 4 groups: Group 1: Curettage and irrigation Group 2: Curettage and irrigation followed by Alvogyl Group 3: Curettage and irrigation followed by a SaliCept patch Group 4: Curettage and irrigation followed by LLLT	Group 4 had significantly better results as compared to the rest of the groups in terms of pain reduction, decreased halitosis and` healing

Table 2: Focuses on the advantages and disadvantages of each treatment option.

S No.	Method / Material	Advantages	Disadvantages
1	Zinc oxide eugenol	• Cost effective [14] • Easily available [14]	• Delayed healing was seen when compared to Alvogyl[15] and GECB Pastille [31] • When used in excess, can cause necrosis of bone [21] • Needs more dressing replacement [31]
2	Alvogyl	• Fast onset of pain relief [14,17] • Less dressing changes along with faster healing is achieved in comparison to ZOE [15]	• Not a sustainable effect [14]
3	Low level laser therapy	• More effective in alleviating pain as compared to Alvogyl[17] and Salicept Patch [33]. • Socket irrigation is not obligatory [17] • Low pain score and faster healing in comparison of the standard treatment of curettage and saline irrigation [18]. • Anti-inflammatory and analgesic effect [34]. • Safe to use on patient [18] • Precise [18]	• Slow onset [17] • High cost [18] • Causes laser-induced oxidative damage to the cells[35].
4	Turmeric	• Anti- inflammatory • Better at alleviating pain as compared to ZOE [20] • Showed healing at margins • No side effect	• More clinical testing needs to be done.
5	Honey	• Antibacterial • Anti-inflammatory • Antioxidant • Minimum patient discomfort [21] • Helps in a faster recovery • Helps in formation of granulation tissue by shedding of the necrotic tissue[36] • Hygroscopic, hence rendering the bacteria inactive [21] • No side effect	• Less clinical evidence available

S No.	Method / Material	Advantages	Disadvantages
6	Ozone gel	• Antimicrobial [16] • Ozone water is more biocompatible as compared to its gaseous or oil based form [16]	• Antimicrobial effect is transient, hence it needs to be reapplied which would be difficult to do at home [16] • Can only be used through an oil based media as ozone water has a short half life[16]
7	Chlorhexidine gel	• Favourable choice of modality for preventing dry socket in recently extracted sockets for every 12 hours for the next 7 postoperative days, as patients can be given a chlorhexidine gel in place of a mouth rinse [37]	• Can be expensive as compared to a chlorhexidine mouthrinse[37]
8	Metronidazole gel	• Decreased postoperative pain and swelling as compared to Chlorhexidine gel [28]	• Metallic taste • May cause an allergic reaction.
9	Platelet rich fibrin	• Less invasive, cost effective and quicker[25] • Minimises risk of allergies as it is patient's own blood [25] • Accelerates bone regeneration and wound healing as it has a rich supply of growth factors[38] • Less postoperative pain or swelling[25]	
10	Antibiotic irrigation (Clindamycin and Rifampicin)	• Formation of granulation tissue and resolution of clinical symptoms like halitosis and erythema occurs faster than the standard method of irrigation with sterile saline [23] • Removes the need for a systemic dosage of antibiotics [23]	• More detailed and long term research is necessary to affirm the role of topical antibiotics in alveolar osteitis. [23]

S No.	Method / Material	Advantages	Disadvantages
11	Concentrated growth factor	• Hastens wound closure and in a short span of time brings down the pain and forms granulation tissue [27]. • Chairside CGF techniques are simple, effective and show favourable treatment outcomes [27]. • Low risk • Cost effective • May require sutures to stabilise the gel within the socket[19] • CGF treated socket generated 75% granulation tissue when compared with LLLT and eliminated any perisocket inflammation or pain symptom within the first week of treatment.[19]	
12	Neocone	• Fastest healing and complete pain relief as compared to Alvogyl and ZOE [14] • Less number of dressing required thus fewer visits [14]	• Slow onset [14]
13	Mercurochrome and Chloromycetin	• No pain experienced by the majority of patients in the first day itself (based on the VAS). [30] • No need for repeating the dressing. [30] • Patients did not require an analgesic along with the dressing [30]	
14	**GECB Pastille**	• Duration of healing was shorter as compared to ZOE.[31] • Analgesic intake was less [31] • Less chair time[31]	• May cause irritation to mucosa
15	**2.5% prilocaine and 2.5% lidocaine gel**	• Pain experienced was less[32] • Antibacterial[39] hence, improves rate of healing. • No need for removal [32] • Comfortable for patient and easier for clinician to use [32]	• May cause hypersensitivity •reaction . • May cause chemical burns.
16	**Sali Cept Patch**	• Helps in wound healing[33]. Helps in increasing blood filtration which further helps in clearing out of pathogens • Enhances immune response by increasing phagocytosis [39] • Antibacterial properties [33] • Antiinflammatory properties. [33] • Cost effective [41]	• More in depth research and clinical trials need to be done to understand the accurate role and functioning of the treatment modality .[40]

Financial Support and Sponsorship
Nil.

Conflicts of Interest
There are no conflicts of interest.

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