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REVIEW ARTICLE

Therapeutic methods for burning mouth syndrome: an umbrella review

Hittalo Carlos Rodrigues de Almeida[1], Ana Maria Ipólito Barros[1], Juliana da Silva Vieira[1], Pedro Henrique Sette-de-Souza[2]*, Márcia Maria Fonseca da Silveira[1], Ana Paula Veras Sobral[1]

[1]Department of Stomatology and Oral Pathology, Faculty of Dentistry, University of Pernambuco, Recife, Pernambuco, Brazil, [2]Graduate Program in Health and Socioenvironmental Development, University of Pernambuco, Recife, Pernambuco, Brazil

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**Corresponding author:*
Pedro Henrique Sette-de-Souza
Programa de Pós-Graduação em Saúde e Desenvolvimento Socioambiental, University of Pernambuco, Recife, Pernambuco, Brazil
Email: pedro.souza@upe.br

Abstract

Background: An umbrella review on the treatment of burning mouth syndrome (BMS) may aid clinicians in selecting the most effective treatment modality to improve patients' symptoms based on the best available evidence.
Aim: The aim of the study was to perform an umbrella review of available systematic reviews on therapeutic methods used to alleviate BMS symptoms.
Methods: This study was conducted following the Preferred Reporting for Systematic Reviews and Meta-analyses and is registered with the Prospective Register of Systematic Reviews (registration number CRD42021268587). The following databases were searched: PubMed, the Cochrane Library, Scopus, Embase, and Web of Science. The PICOT question was "For the relief of symptomatology, discomfort, and burning sensation caused by BMS, what is the best strategy?" A total of 197 articles were retrieved. After eliminating duplicates, 101 studies were evaluated for inclusion. Finally, eight articles were included in the study.
Results: The most indicated pharmacological measure was clonazepam with short- and long-term effects on symptomatology relief. However, a standardized BMS treatment protocol is not described in the literature, since non-pharmacological therapeutic measures, such as psychotherapy and placebos, reduce the symptomatology of the pathology. The quality of the studies was analyzed through the evaluation of systematic reviews in dentistry (Glenny scale) and the Assessment of the Methodological Quality of Systematic Reviews (AMSTAR 2). According to the Glenny scale, the included studies are of moderate-to-high quality. However, according to AMSTAR 2, only two studies are of a high-quality level, while the others are classified as critically low.
Conclusion: The use of pharmacological (clonazepam) and non-pharmacological (psychotherapy and placebo) measures reduces BMS symptoms.
Relevance for Patients: This review on BMS treatment may aid clinicians in making better-informed decisions regarding treatment modality based on the best available evidence.

1. Introduction

Burning mouth syndrome (BMS) is an oral dysesthesia characterized by a burning sensation, burning, or pain on the tip of the tongue and lateral edges, labial mucosa, and hard and soft palate [1,2]. The International Headache Society defines BMS as intraoral discomfort that occurs daily for more than 2 h for at least 3 months without a clinically evident cause [3,4]. Its estimated prevalence is 0.7 – 5.0% in the general population, though being more frequent in middle-aged and older women, mainly in the menopausal or postmenopausal period, with a prevalence of 12 – 18% [5-7]. BMS can be idiopathic/primary when it occurs spontaneously and without specific factors, or secondary, when associated with systemic factors [8,9].

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Although its etiology is unknown, BMS appears to be multifactorial, associated with local, systemic, and/or psychological factors [10,11]. Local factors include parafunctional habits, allergic reactions, infection, chemical factors, galvanism, taste alterations, and xerostomia [10,11]. Systemic factors include endocrine changes (hypothyroidism, diabetes, and menopause), nutritional deficiencies, anemia, Sjögren's syndrome, and esophageal reflux [8-11]. Psychological factors include anxiety, depression, compulsive disorders, and psychosocial stress [9,11].

The clinical condition is bilateral and is usually accompanied by dry mouth, changes in taste, constant pain in the oral mucosa, and a burning sensation [12-14]. Burning may be accompanied by tingling or numbness, and a bitter or metallic taste, though the oral mucosa and salivary flow remain normal [9-12]. The current basic therapeutic strategy is focused on pain reduction and elimination of concomitant symptoms of BMS [1,2,3,9,10].

Healthcare professionals treating patients with BMS face challenges in selecting and applying drug or non-drug therapies to treat BMS. This challenge arises because published clinical trials report symptomatic relief through various protocols, such as the use of clonazepam, capsaicin, pramipexole, cyclosporine, venlafaxine, duloxetine, fluoxetine, pregabalin, α-lipoic acid, acupuncture, low-intensity laser, repetitive transcranial magnetic stimulation of the prefrontal cortex (rTMS), chamomile, and cognitive behavioral therapy [5-14]. A therapeutic protocol for MSB has not yet been established, so the current strategy focuses on reducing the patient's pain and symptoms [12-14].

Due to the challenges dental surgeons face in understanding the etiology of BMS, providing adequate treatment becomes difficult. Systematic reviews describe several clinical management approaches for BMS, with some indicating the efficacy of pharmacological approaches [15-17], while others report the efficacy of non-pharmacological therapies [5,18]. However, some studies have found no significant difference between the two treatment approaches [19,20]. Herein, we aim to provide evidence comparing therapeutic approaches (pharmacological and non-pharmacological) for BMS treatment, as reported in systematic reviews.

2. Methods

2.1. Review protocol and registration

This study was registered in the Prospective Register of Systematic Reviews (PROSPERO; registration number CRD42021257222). Our systematic review was developed following other papers in the literature, the Cochrane manual, and Preferred Reporting for Systematic Reviews and Meta-analyses (PRISMA) guidelines [21].

2.2. Eligibility criteria

The PICOT question is: "For the relief of symptoms, discomfort, and burning sensation caused by BMS, what is the best strategy?" The (P)opulation refers to patients with BMS; the (I)ntervention refers to patients with BMS treated with local/systemic pharmacologic therapy; the (C)omparison refers to patients with BMS treated with a non-pharmacological and/or placebo approaches; the primary (O)utcome refers to symptom reduction, and the secondary outcome refers to discomfort and burning sensation; and the (T)ype of publication refers to systematic reviews published between January 2010 and November 2023.

The selection of systematic reviews was based on the PICOT question and the following eligibility criteria. Inclusion criteria were systematic reviews of randomized and non-randomized clinical trials addressing pharmacological and non-pharmacological treatment for BMS; diagnosis of BMS based on the International Association for the Study of Pain definition and published in any language. The exclusion criteria were duplicate studies and those not in article formats, such as editorials, guides, letters, conference abstracts, theses, and dissertations. Two independent researchers (H.C.R.A. and J.S.V.) performed a literature search from August to December 2023 and updated the literature search results in June 2024.

2.3. Information sources

An electronic search was independently performed by two authors (H.C.R.A. and J.S.V.) in the following databases: PubMed/MEDLINE, Scopus, Embase, Cochrane Library, Web of Science, and grey literature (Open Gray), using the following search strategy: ((burning mouth syndrome*) AND (treatment OR therapeutics OR therapy)) AND (systematic review*).

The search strategy in the PubMed/MEDLINE database included ("burning mouth syndrome"[MeSH Terms] OR "burning mouth syndrome"[MeSH Terms] OR (("burning"[All Fields] OR "burns"[MeSH Terms] OR "burns"[All Fields] OR "burned"[All Fields] OR "burnings"[All Fields]) AND ("mouth"[MeSH Terms] OR "mouth"[All Fields] OR "mouths"[All Fields] OR "mouth s"[All Fields] OR "mouthed"[All Fields] OR "mouthful"[All Fields] OR "mouthfuls"[All Fields] OR "mouthing"[All Fields]))) AND ("therapeutics"[MeSH Terms] OR "therapeutics"[All Fields] OR "treatments"[All Fields] OR "therapy"[MeSH Subheading] OR "therapy"[All Fields] OR "treatment"[All Fields] OR "treatments"[All Fields]) AND "systematic review"[Publication Type]. The detailed search strategy for each platform can be found in Table A1 (Appendix).

In each database, studies were selected based on the title and abstract. Each article was subjected to a full-text review to determine inclusion. The choices made by the two authors (H.C.R.A. and J.S.V.) were analyzed by a third author (A.M.I.B.), and a consensus was reached through discussion.

2.4. Data collection process

All articles were imported into the Rayyan QCRI reference manager (RRID: SCR_017584) for the removal of duplicates and subsequent analysis. One author (H.C.R.A.) collected data regarding author/year, registry/guide, quality assessment, number of articles included, databases analyzed, and study conclusion. A second author (A.M.I.B.) evaluated all the

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collected information. A careful analysis was performed to check for disagreements between the authors. Any disagreements were resolved through discussion with a third author (J.S.V.) until a consensus was reached. The Cohen's Kappa coefficient indicated an intra-examiner agreement of 0.92 and an inter-examiner agreement of 0.90.

2.5. Quality assessment of the studies

The methodological quality of the included systematic reviews was analyzed using the Assessment of Multiple Systematic Reviews (AMSTAR 2) tool [22]. This tool consists of 16 questions that analyze the methodology of systematic reviews of randomized and non-randomized studies, with responses categorized as "Yes," "Partial Yes," or "No." A systematic review is considered well done when all items on the checklist are answered with "Yes."

Systematic reviews were designated as high-quality when they have no weaknesses or non-critical weaknesses; moderate quality when the reviews have more weaknesses but no critical flaws; low quality when the reviews have one critical flaw and may not provide an accurate and comprehensive summary of available studies addressing the PICOT question; and critically low-quality when the reviews have more than one critical flaw and should not be used to provide an accurate and comprehensive summary of the available studies.

Glenny's scale [23] was applied to analyze the included studies. The scale consists of 15 items that assess the structure of the topics covered, formulation of the PICOT question, and interpretation of the data. Scoring was performed as follows: each item with a "Yes" answer was assigned one point, and the total score obtained can range from 0 – 15 points. A score of 10 – 15 indicates high quality, 5 – 9 points indicates medium quality, and 0 – 4 points indicate low quality.

To increase the ability to evaluate evidence and support clinical recommendations more robustly, each study was categorized based on the overall risk category and classified as low, unclear, or high risk. The quality of all included articles was assessed based on Grading of Recommendations, Assessment, Development, and Evaluations (GRADE) [24].

3. Results

A total of 298 articles were found in the databases. After duplicate studies were excluded, the titles and abstracts were reviewed to match the eligibility criteria. A total of 23 articles were selected for full-text review, and eight studies were finally selected for analysis in this umbrella review. The reasons for exclusion from the studies are listed in Figure 1.

The characteristics of the systematic reviews are described in Table 1. Results of the quality assessment of the systematic reviews (AMSTAR 2, GRADE, and Glenny's scale) are described in Tables 2 and 3.

Therapeutic modalities for the relief of BMS symptoms include the use of pharmacological (clonazepam) and non-pharmacological (psychotherapy and placebo) measures. Among all therapeutic managements, clonazepam was the most effective medication in relieving short-[15,16,18] and long-term [5,9] symptoms, either topically or systemically.

Glenny's scale and AMSTAR 2 were used to assess the methodological quality of the included studies. AMSTAR 2 is a significant revision of the original AMSTAR tool [22], rating overall confidence in the review results as high, moderate, low, and critically low. The reliability index of the included studies was high for two studies [17,20] and critically low for six studies [5,9,15,16,18,19]. Two studies were considered to have moderate quality of evidence (based on GRADE) [17,20].

The score range for Glenny's scale [23] was between 9 and 15 (moderate to high quality); Item 4 of Glenny's scale did not apply to any of the studies (Table 3). It should be noted that some revisions did not clarify if two reviewers conducted the article peer review process. However, the selection of articles by at least two reviewers was addressed in subsequent studies. The aspects that presented the most significant deficiency of information were the search for published and unpublished literature (item 4), the search in all languages (item 5), and the assessment of heterogeneity and discussion of the reasons for the variation (item 14) (Table 3).

4. Discussion

In this umbrella review, we aimed to evaluate the therapeutic modalities for the relief of BMS symptoms. We found that several treatment strategies could be effective in some groups of patients with BMS, such as clonazepam [5,9,15,16,18], α-lipoic acid [5,15,16,18], capsaicin [5,18], and psychotherapy [18], in addition to treatment with placebo [19,20].

The different treatments reflect the heterogeneity of the studies, especially the methodology. Low sample size [16,18,19,20], short follow-up [5,9], lack of comparison of several therapeutic agent arms with placebo [17,19,20], and high variability of the scales used to assess pain reduction [5,9,15-20] are limitations found in the selected studies. These factors demonstrate heterogeneous methodologies that make it challenging to compare the effects of interventions.

Through the data collected, we conclude that the topical use of clonazepam is a suitable and effective alternative for relieving symptoms of BMS. This efficacy may be related to its anxiolytic properties that potentiate the action of the inhibitory γ-aminobutyric acid (GABA) neurotransmitter [25,26]. Systemic clonazepam induces central nervous system inhibition due to its anticonvulsant action, leading to muscle relaxation, sedation, and tranquilization [25-27]. When used as a topical medication, clonazepam reduces BMS symptoms without causing the adverse effects associated with systemic use, such as drowsiness, fatigue, and headache [27]. Besides that, among the current evidence, the psychological effects of BMS should be considered during clinical management. In some studies, the comparison of medication and/or non-pharmacological therapy between two groups revealed no difference compared to the use of placebo, with no influence on treatment results [17,19,20].

Regarding non-pharmacological therapy, the use of herbal medicines, such as 0.02% capsaicin, reduces the symptoms of BMS and may be valuable in establishing treatment for the

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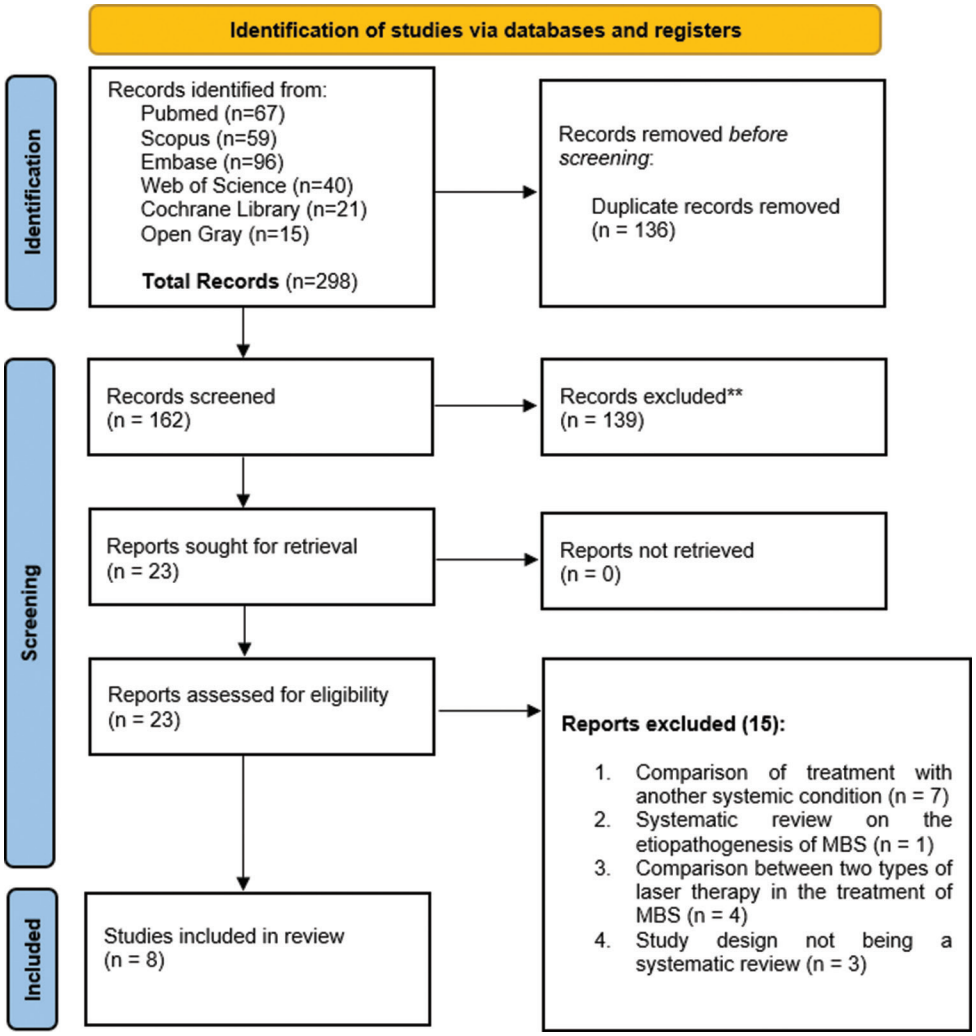

Figure 1. The flow of the literature review process
Abbreviation: BMS: Burning mouth syndrome

condition [5,18]. Key advantages of herbal medicines are the absence of side effects and the ease of use by the patient. Moreover, laser therapy, with its analgesic, anti-inflammatory, and tissue repair properties, is also described in the literature to effectively reduce BMS symptoms. The analgesic action of laser therapy is related to the inhibition of pain mediators and the increase in cell membrane potential, which reduces the conduction speed of nerve impulses and explains the observed treatment results [5].

Glenny's scale and AMSTAR 2 were used to assess the quality of the systematic reviews included in this umbrella review. For Glenny's scale, a score is assigned to classify the results into different quality categories. In contrast, for AMSTAR 2, there is no such quantification, which may explain the differences in results. Shea *et al.* [22] highlighted that the quality assessment process should be based on identifying critical domains, as scores can mask the shortcomings of studies and decrease the reliability of the results obtained from a systematic review. Moreover, AMSTAR 2 provides a more accurate assessment of the methodology of systematic reviews by recording data in a platform (e.g., PROSPERO), using a systematic review guideline (e.g., PRISMA), and applying a focused question (PICOT), among other items, thereby improving methodological quality.

The PROSPERO registration tool has been available since February 2011 and allows a free search of systematic reviews to maintain transparency. However, only three of the eight articles included were registered in PROSPERO [15,18,20], despite all being published after the tool's implementation. The registration of a systematic review provides a scientific evidence base, improves data quality, and minimizes the risk of bias [28]. However, to register in PROSPERO, it is necessary to follow a protocol that requires all methodological decisions to be selected and justified. This may have influenced the decision of many authors not to register their systematic reviews, since they may not have adhered to some of the items in this protocol.

In addition to PROSPERO registration, following the PRISMA guidelines improves the quality of a systematic review. Among the eight studies, only two reviews did not use PRISMA as a guide [17,19]. This could be due to the review being published before the launch of this protocol. Following this registry provides systematic and explicit methods to identify,

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Table 1. Characteristics of the included studies

Author/year	Register/guide	Quality evaluation	No. of included articles	Study design	Database	Conclusion
Tan *et al*. 2021 [20]	Yes/PRISMA	Cochrane risk-of-bias assessment tool	22	RCT	PubMed/Medline, Embase Ovid, Cochrane Database of Systematic Reviews, and Cochrane Central Register of Controlled Trials	A more significant sample size, multicenter studies, and multi-arm comparison of therapeutic agents with placebo and longitudinal follow-up studies are recommended to establish a standardized MBS treatment protocol.
Reyad *et al*. 2020 [5]	No/PRISMA	NR	53	RCT and case report	PubMed/Medline, EudraCT, ClinicalTrials.gov, and CENTRAL	Alpha lipoic acid, clonazepam, capsaicin, and low-intensity laser therapy are effective treatment methods for the treatment of MBS.
Ślebioda *et al*. 2020 [9]	No/PRISMA	Cochrane Collaboration tool for assessing the risk of bias in RCTs	30	RCT	PubMed/Medline, Web of Science, and Cochrane Library	Clonazepam seems to be the most effective treatment option for pain relief in MBS.
Souza *et al*. 2018 [15]	Yes/PRISMA	NR	29	RCT	PubMed/Medline, Embase, and SciELO	Clonazepam and alpha lipoic acid display effective results in the treatment of MBS.
Liu *et al*. 2017 [16]	No/PRISMA and IOM	Cochrane Collaboration tool for assessing the risk of bias in RCTs	22	RCT	PubMed/Medline, Web of Science, and Cochrane Library	Topical clonazepam, alpha lipoic acid, gabapentin, and psychotherapy may provide pain relief in MBS.
Kisely *et al*. 2016 [18]	Yes/PRISMA	Cochrane Collaboration tool for assessing the risk of bias in RCTs	24	RCT	PubMed/Medline, and Embase	Clonazepam, alpha lipoic acid, capsaicin, and psychotherapy display short-term (2 months) pain relief benefits. Studies are warranted for long-term evaluation.
Mcmillan *et al*. 2016 [17]	Cochrane Database of Systematic Reviews/NR	Cochrane Collaboration tool for assessing the risk of bias in RCTs	60	RCT	PubMed/Medline, Embase, and Cochrane Library	There is no sufficient evidence to support or refute the use of any interventions for MBS.
Kuten-Shorrer *et al*. 2014 [19]	No/NR	NR	12	RCT	PubMed/Medline	New RCTs are suggested to investigate treatment protocols for MBS, focusing on sample size, adequate follow-up periods, and the use of a standard placebo.

Abbreviations: NR: Unreported; RCT: Randomized clinical trial; EudraCT: European Union Drug Regulating Authorities Clinical Trials Database; PRISMA: Preferred Reporting for Systematic Reviews and Meta-analyses; IOM: Institute of Occupational Medicine; MBS: Mouth burning syndrome; CENTRAL: Cochrane Central Register of Controlled Trials.

Table 2. Assessment of Multiple Systematic Review 2 scale of the included studies and quality of evidence (Grading of Recommendations, Assessment, Development, and Evaluations)

Study	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Overall confidence rating	Quality of evidence (GRADE)
a	Y	Y	Y	PY	Y	Y	PY	Y	Y	Y	NM	NM	Y	Y	NM	Y	High	Moderate
b	Y	PY	N	PY	N	N	N	Y	N	N	NM	NM	N	N	NM	Y	Critically low	Low
c	N	PY	N	PY	Y	Y	N	PY	N	N	NM	NM	Y	N	NM	Y	Critically low	Low
d	N	N	N	PY	N	N	N	PY	N	Y	NM	NM	N	N	NM	Y	Critically low	Low
e	Y	N	N	PY	Y	Y	N	PY	N	N	NM	NM	Y	N	NM	Y	Critically low	Low
f	N	N	Y	N	Y	Y	N	PY	N	N	NM	NM	N	N	NM	Y	Critically low	Low
g	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NM	NM	Y	Y	NM	Y	High	Moderate
h	Y	N	Y	PY	N	N	N	PY	N	Y	NM	NM	N	N	NM	Y	Critically low	Low

Note: 1: PICO; 2: Review methods+; 3: Study selection; 4: Search strategy+; 5: Duplicate study selection; 6: Duplicate data extraction; 7: List of excluded studies+; 8: Included studies (adequate details); 9: Assessment of risk of bias+; 10: Report on the sources of funding; 11: Methods for statistical analysis; 12: Impact of risk of bias in individuals; 13: Risk of bias in individual studies; 14: Heterogeneity satisfactory; 15: Investigation of publication bias+; 16: Report of conflict of interest; studies a–h refers to references [5,9,15-20] respectively.
Abbreviations: Y: Yes; PY: Partial yes; N: No; +: Critical domain; NM: No meta-analysis conducted.

select, and critically evaluate relevant research and data. Failure to do so may indicate the presence of flaws in the evaluation of the included articles [29].

All articles were available in the PubMed database [5,9,15-20]; most were available in the Cochrane Library [5,9,16,17], followed by Embase [15,17,18,20]; a limited number of studies were available in other databases [9,15]. The grey literature search was not performed for any of the articles included in the review. This item was evaluated on Glenny's scale, in which all the studies analyzed did not receive a score.

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Table 3. Glenny scale of the included studies

No.	Questions	Studies							
		a	b	c	d	e	f	g	h
1	Did the review address a focused question?	1	1	1	1	1	1	1	1
2	Did the authors look for appropriate papers?	1	1	1	1	1	1	1	1
3	Do you think the authors attempted to identify all relevant studies?	1	1	1	1	1	1	1	1
4	Was there a search for published and unpublished literature?	0	0	0	0	0	0	0	0
5	Were all languages considered?	0	0	0	0	0	0	1	0
6	Was any hand-searching carried out?	1	0	1	0	0	1	1	0
7	Was it stated that the inclusion criteria reviewers?	1	1	1	1	1	1	1	1
8	Did reviewers attempt to assess the quality of the included studies?	1	0	1	1	1	1	1	1
9	If so, did they include this in the analysis?	1	0	1	1	1	1	1	1
10	Was it stated that the quality assessment was carried out by at least two reviewers?	1	0	0	0	1	0	1	0
11	Are the results given in a narrative or pooled statistical analysis?	1	1	1	1	1	1	1	1
12	If the results have been combined, was it reasonable to do so?	1	1	1	1	1	1	1	1
13	Are the results clearly displayed?	1	1	1	1	1	1	1	1
14	Was an assessment of heterogeneity made and reasons for variation discussed?	1	0	0	0	0	0	1	1
15	Were results of the review interpreted appropriately?	1	1	1	1	1	1	1	1
Total		13	8	11	10	11	11	14	11

Note: Studies a–h refer to references [5,9,15-20], respectively.

The gray literature is relevant and may influence the results of the analysis.

The risk of bias (item 9 of AMSTAR 2) is evident in six articles [5,9,15,16,18,19] due to flaws in the methodological construction, such as statistical heterogeneity, lack of blinding of patients and evaluators when assessing results, without previously establishing the risks of confounding bias and selection of studies. Thus, the quality was classified as critically low according to AMSTAR 2 for the presence of critical flaws in terms of bias, a small sample size of the included studies, and heterogeneity of the results. Two articles were rated positively in evaluating item 9 of AMSTAR 2 [17,20].

Randomized clinical trials included in systematic reviews should be designed according to the Consolidated Standards of Reporting Trials (CONSORT) and include accurate sample size calculations. In addition, it is pertinent to include variables that enable a more comprehensive assessment of BMS symptoms, such as anxiety level, depression, and quality of life.

The umbrella review of systematic reviews is a new approach to evaluating and summarizing the results in a single document that can be used to guide health professionals and policymakers and is considered the highest level of scientific evidence [28]. However, limitations of this type of study include the lack of detailed analysis of the primary studies; the use of data retrieved from existing systematic reviews; and heterogeneity among the selected studies, which may increase the risk of bias.

There are no high-quality randomized controlled trials addressing drug therapy in BMS. Hence, more randomized controlled trials need to be conducted in the future. Recently, a study reported that low doses of amitriptyline are effective against irritable bowel syndrome [30]. Amitriptyline may either be effective or increase pain, making it important to discuss its role in BMS treatment from a pain perspective. Adverse events with amitriptyline are mainly related to its anticholinergic effects, including dry mouth.

Therefore, to validate the data obtained, the studies must include an umbrella review based on the registration protocol and checklist of indispensable items (PRISMA). Systematic reviews should be designed with methodological assessment scales to include the items necessary for high-quality scientific evidence.

5. Conclusion

The pharmacological use of clonazepam and non-pharmacological management, such as psychotherapy and placebo, effectively relieve BMS symptoms. However, new randomized clinical trials are suggested to investigate treatment protocols for the condition.

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Conflicts of Interest

The authors declare that they have no conflicts of interest.

Ethics Approval and Consent to Participate

Not applicable.

Consent for Publication

Not applicable.

Availability of Data

Data are available from the corresponding author on reasonable request.

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Appendix

Table A1. Search strategies and databases

Database	Search strategy
Pubmed	(“burning mouth syndrome”[MeSH Terms] OR “burning mouth syndrome”[MeSH Terms] OR ((“burning”[All Fields] OR “burns”[MeSH Terms] OR “burns”[All Fields] OR “burned”[All Fields] OR “burnings”[All Fields]) AND (“mouth”[MeSH Terms] OR “mouth”[All Fields] OR “mouths”[All Fields] OR “mouth s”[All Fields] OR “mouthed”[All Fields] OR “mouthful”[All Fields] OR “mouthfuls”[All Fields] OR “mouthing”[All Fields]))) AND (“therapeutics”[MeSH Terms] OR “therapeutics”[All Fields] OR “treatments”[All Fields] OR “therapy”[MeSH Subheading] OR “therapy”[All Fields] OR “treatment”[All Fields] OR “treatment s”[All Fields]) AND “systematic review”[Publication Type]
Scopus	‘burning mouth syndrome’ AND therapy AND systematic AND review
Embase	‘burning mouth syndrome’ AND therapy AND systematic AND review
Web of Science	(TS=Burning Mouth Syndrome AND TS=Treatment AND TS=Systematic Review
Central Cochrane Library	“burning mouth syndrome” in All Text AND “treatment” in All Text AND “systematic review” in All Text
Open Gray	burning mouth syndrome AND therapy AND systematic AND review

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