

Clinical Practice Guideline: **Moxibustion**

Date of Implementation: **February 9, 2006**

Product: **Specialty**

Table of Contents

GUIDELINES	1
DESCRIPTION/BACKGROUND	3
EVIDENCE REVIEW	3
Adverse Events	4
Effectiveness	5
PRACTITIONER SCOPE AND TRAINING	11
References	12

GUIDELINES

American Specialty Health – Specialty (ASH) considers indirect moxibustion medically necessary for musculoskeletal pain conditions where the application of heat is indicated.

American Specialty Health – Specialty (ASH) considers direct moxibustion not medically necessary due to risk of direct harm.

The potential for direct harm from burns with the use of direct moxibustion and the availability of the safer alternative of indirect moxibustion has led ASH clinical committees to only consider medically necessary the use of the indirect form of moxibustion by contracted practitioners. When indirect moxibustion (e.g., warming needle, moxa box, or placing the moxa on ginger, garlic, aconite, or another appropriate physical barrier) is used, there is no direct contact between the patient’s skin and the moxa. Creams, oils, ointments, and other liquid or semi-solid substances are not considered acceptable barriers for adequate patient safety. While techniques such as placing moxa on a needle are considered indirect moxibustion, they still exhibit the potential for heated moxa fragments and/or ash to fall onto the patient causing harm. These techniques should only be performed while using appropriate precautions to prevent moxa from contacting the patient, including physical barriers of sufficient size and composition to prevent injury (e.g., heat shields large enough to capture any falling moxa or ashes). For more information, see the *Techniques and Procedures Not Widely Supported as Evidence Based (CPG 133 – S)* policy.

Patients must be informed verbally and in writing of the nature of any procedure or treatment technique that is considered experimental/investigational or unproven, poses a significant health and safety risk, and/or is scientifically implausible. If the patient decides to receive such services, they must sign a Member Billing Acknowledgment Form (for Medicare use Advance Beneficiary Notice of Non-Coverage form) indicating they understand they are assuming financial responsibility for any service-related fees. Further, the patient must sign an attestation indicating that they understand what is known and unknown about, and the possible risks associated with such techniques prior to receiving these services. All procedures, including those considered here, must be documented in the medical record. Finally, prior to using experimental/investigational or unproven procedures, those that pose a significant health and safety risk, and/or those considered scientifically implausible, it is incumbent on the practitioner to confirm that their professional liability insurance covers the use of these techniques or procedures in the event of an adverse outcome.

GENERAL MEDICAL NECESSITY CRITERIA

Adjunctive therapies such as moxibustion may be medically necessary when **all** of the following criteria are met:

- This therapy service is considered medically necessary when the judgment, knowledge, and skills of a qualified practitioner of therapy services (as defined by the scope of practice in each state) are necessary to safely and effectively furnish this therapy service because of the complexity and sophistication of the plan of care and the medical condition(s) of the patient, with the goal of improving an impairment or functional limitation.
- The patient's condition has the potential to improve or is improving in response to this therapy service.
- The patient has not achieved maximum improvement from care.
- There is an expectation that the patient's anticipated improvement is attainable in a reasonable and predictable period of time and will result in a clinically significant level of functional improvement through the use of this therapy service.
- Improvement or restoration of function cannot be reasonably expected as the patient gradually resumes normal activities without the provision of skilled therapy services.
- The submitted documentation objectively verifies the patient's progressive functional improvement over specific time frames and clinically justifies the initial or continued use of this therapy service.
- The patient's treatment is individualized and there is documentation outlining quantifiable, attainable treatment goals with the use of this therapy service and the patient's overall plan of care.
- This therapy service is intended to improve, adapt or restore functions which have been impaired or lost as a result of illness, injury, loss of a body part, or congenital abnormality.

- The use of this therapy service (e.g., dosage, frequency) corresponds with the current nature, status, and severity of the patient's condition(s).
- The use of this therapy service is decreased as the patient displays improvement and the plan of care transitions into other skilled treatment procedures that can safely and effectively restore, adapt or improve the patient's impaired function(s).
- The use of this therapy service is safe and effective for the patient's condition, and the patient is able to properly provide the necessary feedback for its safe application.
- The use of this therapy service is not redundant with other therapy services used on the same body part during the same session and is not duplicative with another practitioner's treatment plan.

DESCRIPTION/BACKGROUND

Moxibustion involves stimulation of specific acupuncture points and/or meridians (energy pathways throughout the body) by the burning of an herb called *moxa* (dried *Artemisia vulgaris* or mugwort) or a combination of several traditional Chinese herbs (also referred to as *moxa*) over these points/meridians. The herbs are pressed together into cigar-shaped sticks or small cones. Traditionally, there are two approaches to the application of these medicinal herbs: direct and indirect moxibustion. With *direct moxibustion*, the cone is lit and permitted to burn down to the skin. Some practitioners may also use a thin layer of cream or oil on the skin before applying the moxa to help the cone adhere to the skin. *Indirect moxibustion* involves using a protective barrier such as a slice of ginger, garlic, or a layer of salt between the skin and the moxa or using a moxa stick held away from the skin. This helps prevent the burning moxa and/or ash from contacting or injuring the skin.

When lit, moxa burns slowly and provides a penetrating heat that enters the meridians to enhance the circulation of blood and *qi* (vital energy). The purpose is to warm, stimulate, and strengthen the blood and *qi* of the body to promote healing or normal functioning of the body.

EVIDENCE REVIEW

Tian et al. (2020) reviewed 7 databases yielding 97 systemic reviews of moxibustion from 2011 to 2019. Reporting quality was assessed based on the Preferred Reporting Items for Systemic Reviews and Meta-Analyses (PRISMA); however, moxibustion information was assessed based on the standards for Reporting Interventions in Clinical Trials of Moxibustion (STRICTOM). The type of moxibustion was not provided in 69.1% of reviews. Rationale for selection of points for moxa was not included in 67%. Additionally, 28.9% did not list the number or duration of treatments, and 69.1% did not provide information about safety. The authors concluded that the reporting quality of systematic reviews of moxibustion needs further improvements in terms of adequate reporting. In 2020, the PRISMA guidelines were extended including specific references to the evaluation of moxibustion in systematic reviews (Zhang et al).

Adverse Events

To investigate adverse events of acupuncture (including the use of moxibustion), Yamashita et al. (1999) reviewed all relevant cases of adverse events reported by therapists at the Tsukuba College of Technology Clinic in Japan over a six-year period. Eighty-four therapists participated in this study which included a total of 65,482 treatments. Of 94 adverse events (including acupuncture and/or moxibustion related events), 7 cases of burn injury and 1 case of numbness in the extremities were reported. An adverse event was defined as an unfavorable medical event that occurred during or after the treatment regardless of causal relationships. No serious or severe cases such as pneumothorax, infection, or spinal cord injury were reported by the participants. The results indicate that serious or severe adverse events are rare in standard practice. The reviewers suggest that most severe or serious cases of adverse events caused by acupuncture reported in journals are cases of negligence.

Park et al. (2010) completed a study to identify adverse events of moxibustion as reported in the medical literature. Adverse events related to moxibustion treatment were reported in eighteen studies. The most common adverse events identified were allergic reactions, burns, and infections such as cellulitis and hepatitis C. In clinical trials, various adverse events such as rubefaction, blistering, itching sensations, discomfort due to smoke, general fatigue, stomach upsets, flare-ups, headaches, and burns were also reported. Tenderness and pressure in the epigastric region or in one of the hypochondriac regions, unpleasant odor with or without nausea and throat problems, abdominal pain, premature birth, premature rupture of the membranes and bleeding due to excess pressure on the anterior placenta were reported in pregnant women. The authors concluded that risk is involved in moxibustion with reports of several kinds of potential adverse events such as allergy, burn and infection.

Furuse et al. (2017) conducted a multicenter prospective survey of adverse events related to acupuncture and moxibustion at eight university acupuncture clinics over a 5–7-month period. Moxibustion treatments included many forms including moxa on needle, stick moxa, and box moxibustion. Out of 14,039 acupuncture and/or moxibustion treatments, 847 (6.03%) reported adverse events. Adverse events included subcutaneous bleeding, hematomas, and pain at needle insertion sites. No serious adverse events were reported; 55 of these were small burns due to direct moxibustion. Twenty-four cases of burns from other moxa were noted, 19 of which were first degree burns, 4 superficial second degree burns and 1 burn injury of unknown character.

A case report of adverse reaction to moxibustion was published by Singh et al. (2020). The patient was treated with direct scarring moxibustion on the ankle. Multiple co-morbidities were present likely resulting in non-healing of the burn/blister from the moxa. The area became infected resulting in septic shock and necrotizing fasciitis of the lower leg.

1 **Effectiveness**

2 A literature review by Dharmananda (2004) was inconclusive as to whether moxibustion
3 is more effective than acupuncture or other stimulus methods administered for the same
4 condition. In the absence of more detailed studies, moxa is applied primarily on the basis
5 of the traditional acupuncture point therapeutic indications, such as treating syndromes
6 associated with cold, retention of food, spasms, immune deficiency, and local stagnation
7 of fluids with the formation of masses. Moxa may be utilized in some cases of heat
8 syndromes.

9
10 Thirty-five stroke patients participated in a study to evaluate the efficacy of
11 electroacupuncture (EA) and moxibustion (Moxa) on spasticity due to stroke (Moon et al.,
12 2003). Fifteen patients were randomized to the EA group, 10 to Moxa, and 10 to the control
13 group. The efficacy of treatment was measured before, immediately, 1 hour, 3 hours, 1 day,
14 5 days, 10 days, and 15 days after the start of treatment using a modified Ashworth scale
15 (MAS). In the Moxa group, there was no significant change in the MAS scores after the
16 first treatment. In the Moxa and control group, there was no significant change in MAS
17 scores.

18
19 Lee et al. (2010) completed a systematic review on moxibustion for treating pain. They
20 concluded that given the limited number of studies and high risk of bias, no conclusions
21 can be drawn.

22
23 Choi et al. (2011) completed a systematic review and meta-analysis on moxibustion for
24 rheumatic conditions. A total of 14 RCTs met inclusion criteria. All were of low
25 methodological quality. They concluded that the systematic review fails to provide
26 conclusive evidence for the effectiveness of moxibustion compared with drug therapy in
27 rheumatic conditions. The total number of RCTs included in this review and their
28 methodological quality were low, making it difficult to draw firm conclusions.

29
30 In a randomized controlled study of 70 patients with rheumatoid arthritis, Yu et al. (2020)
31 monitored pain levels and serological disease markers. Clinical symptoms and serum
32 biomarker levels were significantly improved when moxibustion was added to
33 pharmaceutical treatments. Methods used included both indirect and direct moxibustion on
34 each patient. Direct moxa was performed with moxa cones with small amounts of Vaseline
35 and indirect moxa was performed with gauze and salt under the moxa cone.

36
37 In a 2010 systematic review, 4 RCTs met all inclusion criteria. Two studies suggested that
38 indirect moxibustion provided significant improvements in pain in participants with
39 osteoarthritis when compared with medication for pain management. Choi et al. (2012)
40 also completed a systematic review and meta-analysis on moxibustion and treatment of
41 osteoarthritis (OA). Eight RCTs met inclusion criteria, and most of them had significant
42 methodological weaknesses. The authors concluded that moxibustion may be effective in

1 symptom management among patients with knee OA, however given the low number of
2 RCTs and the high risk of bias, no definitive conclusion could be made.

3
4 Zhao et al. (2014) compared the effectiveness and safety of traditional Chinese
5 moxibustion to that of sham moxibustion in patients with chronic knee osteoarthritis
6 (KOA) pain. The WOMAC pain scores showed greater improvement in the active
7 treatment group than in control at weeks 3 and 24 as did WOMAC physical function scores
8 of the active treatment group at weeks 3 and 12 but not 24. Patients and practitioners were
9 blinded successfully, and no significant adverse effects were found during the trial. The
10 authors concluded that a 6-week course of moxibustion seems to relieve pain effectively
11 and improve function in patients with KOA for up to 18 weeks after the end of treatment.
12 Kim et al. (2014) tested the effectiveness of moxibustion on pain and function in chronic
13 knee osteoarthritis (KOA) and evaluated safety. The authors concluded that indirect
14 moxibustion may improve pain, function, and quality of life in KOA patients, but adverse
15 events are common according to this study. Limitations included no sham control or
16 blinding.

17
18 Choi et. al. (2017) completed a systematic review and meta-analysis of the use of
19 moxibustion for osteoarthritis. Nineteen RCTs met inclusion criteria. Moxa was found to
20 be more effective at pain reduction than sham moxa. Eight RCTs showed superior effects
21 of moxa compared with medication therapies. Three studies noted superior or equivalent
22 effects of moxa on symptom scores when compared with intra-articular or topical
23 medication therapies. The authors reported the levels of evidence as moderate due to high
24 risk of bias and small sample size. However, they also noted the existing evidence was,
25 “sufficiently convincing to suggest that moxibustion compared with sham moxibustion and
26 oral drugs is effective for pain reduction and symptom management in knee osteoarthritis.”

27
28 A review of systematic reviews was performed by Yin et al. (2022) to evaluate previous
29 reviews of moxibustion for knee osteoarthritis. Ten systemic reviews qualified and
30 included 57 RCTs and 5,149 total participants. Studies included multiple types of
31 moxibustion including traditional, thunder fire, and indirect. A re-meta-analysis
32 demonstrated that moxibustion and moxibustion combined treatments improved the total
33 effectiveness rate in knee osteoarthritis more significantly than the control groups. Eight
34 systematic reviews reported adverse events. No serious effects were reported in the moxa
35 or control groups. Low methodological quality in the reviews and high risk of bias in the
36 original studies reduced the reliability of the results.

37
38 Fifteen systemic reviews representing 13,940 participants were evaluated by Jun et al.
39 (2023). Warm needle acupuncture was shown to be more effective than controls (Western
40 Medicine, acupuncture, traditional medicine in various combinations) for treating
41 osteoarthritis in all but two studies that didn’t report significant differences between warm
42 needle acupuncture and electroacupuncture. Outcomes included WOMAC score, total

effective rate, function, and pain reduction. Most of the studies centered on osteoarthritis of the knee. Methodological quality of the studies was very low to moderate due to issues with reporting of protocols, justifications for excluding studies, and conflicts of interest. Two studies scored greater than 85% compliance with PRISMA guidelines. Adverse events overall were fewer in the warm needle groups and no serious events were noted in these moxibustion groups.

Yuan et al. (2015) reviewed the use of traditional Chinese medicine (TCM) for neck pain and low back pain including 75 trials and 11,077 participants. As part of this larger review, the authors concluded that the efficacy of moxibustion is unknown because no direct evidence was obtained. The authors also noted that TCM modalities are relatively safe.

Yao et al. (2023) performed a meta-analysis of RCTs of moxibustion for lumbar disc herniation. Nineteen studies of 1,888 patients were included. Studies showed no difference between moxibustion and acupuncture for response rate, VAS scores or the Japanese Orthopedic Association score. Two studies showed that moxibustion may have similar effects on the VAS score when compared to medication. Evidence level was very low to low. The authors concluded that moxa on its own may not be appropriate for treating lumbar disc herniations but may be used as an adjuvant treatment.

Gadau et al. (2014) performed a systematic review of RCTs according to revised STRICTA criteria for treatment of lateral elbow pain. Nineteen RCTs were included in the review and contained a total of 1,190 subjects. All studies contained at least one domain on the Cochrane risk tool of high or uncertain bias. Three moderate quality studies showed acupuncture to be more effective than sham. Ten RCTs of lower quality demonstrated acupuncture or moxibustion as superior to conventional treatments. Six low quality studies reported acupuncture and moxa were more effective than acupuncture alone. Moxibustion types in these studies included indirect methods such as moxa on the needle or moxa cone on a slice of ginger. Three studies used direct moxa. Adverse events were reported in only four studies. Two of these studies reported no adverse events. Two reported permanent scars with blister-forming moxa treatments. The authors recommend more rigorous study designs to evaluate safety and efficacy.

Liu et al. (2020) showed indirect moxibustion (moxa stick) was an effective treatment for primary dysmenorrhea especially when performed during the premenstrual time in a randomized controlled trial with 208 patients. One adverse event was reported due to overly long moxibustion administration. The reaction resolved in two days, and the patient resumed the study.

Two other studies suggested positive effects for *indirect or direct* moxibustion on pain in scleroma or herpes zoster compared with pharmaceutical therapy. Due to only a few

studies, most with a high risk of bias, the authors concluded that more rigorous studies are needed to determine the effectiveness of moxibustion (Lee et al., 2010).

A meta-analysis including 11 RCTs and 927 patients with diabetic peripheral neuropathy was completed in 2020 by Tan et al. Most of the trials included in the analysis used indirect moxa, but some did not clearly describe moxa methods used. No adverse reactions were reported in one study and no mention of any adverse reactions was noted in the other 10 studies. Per the author, attention must be paid to adverse events because moxibustion is not free of risks and generates heat, smoke, and tar that may present a risk of adverse events. The availability of a large amount of safety data will be necessary to standardize the moxibustion therapy.

Wu et. al. (2021) conducted a systematic review and meta-analysis of moxibustion treatment for postherpetic neuralgia. A total of 13 RCTs with 798 patients were reviewed. Moxibustion was compared to controls including pharmaceutical and herbal medications, and no treatment. Treatment ranged from 14 to 35 days. The main outcomes were efficacy rate and the Visual Analog Scale (VAS); Secondary outcome measures were adverse events. Moxibustion achieved a significantly higher efficacy rate and lower VAS scores. Five studies reported adverse reactions with moxa including dizziness, abdominal distention, nausea/vomiting, burns, redness/rash/itching, blisters, infection. The authors report that heterogeneity and poor methodological quality (e.g., inappropriate randomization methods, difficulty blinding participants and outcome assessors) impaired the ability to make conclusions about efficacy or safety of moxibustion in the treatment of postherpetic neuralgia.

Park et al. (2013) completed a systematic review and meta-analysis evaluating the current evidence on moxibustion for improving global symptoms of irritable bowel syndrome (IBS). A total of 20 RCTs were eligible for inclusion ($n = 1,625$). The risk of bias was generally high. The authors suggest that moxibustion may provide benefit to IBS patients although future studies are necessary to confirm these results.

Similar results for moxibustion and treatment of inflammatory bowel disease (IBD) were noted in a review by Ji et al. (2013). According to Stein (2017), acupuncture and moxibustion therapy have been shown to reduce inflammation and symptoms in animal and human studies. However, current clinical trials of acupuncture and moxibustion are of insufficient quality to recommend them as alternative therapy.

Ten randomized controlled trials with 760 patients were included in a systematic review and meta-analysis of moxibustion treatment for constipation by Yao et al. (2020). Any type, duration of moxibustion was permitted in the reviewed trials. Moxibustion was noted to be more clinically effective than controls (other Chinese Medicine Treatments or Western Medical therapies) regardless of the type of moxa therapy used. Four out of 10

1 studies listed adverse reactions due to moxa, and one reported no side effects. The authors
 2 concluded, it is not yet possible to assess the safety level of moxibustion therapy, and the
 3 quality of the included literature is low, so rigorous studies are warranted.

4
 5 Lee et al. (2010) reviewed 5 RCTs comparing the effects of moxa with conventional
 6 therapies for nausea and vomiting in cancer patients. A meta-analysis showed a
 7 significantly lower frequency of chemotherapy-related nausea and vomiting when moxa
 8 was used. The authors reported that all studies had a high risk of bias so there is not enough
 9 evidence to draw a conclusion without further research.

10
 11 A review by Lee et al. (2014) assessed the effectiveness of moxibustion with usual care for
 12 cancer-related fatigue vs. usual care alone. Four RCTs with 374 subjects were included in
 13 the review. Indirect moxa was used in all four studies, either moxa stick, moxa on ginger
 14 or both. Points for moxibustion were chosen according to Traditional Chinese Medicine
 15 theory. The moxa treatments ranged in length from 5-30 minutes and in number from 14
 16 to 40. One study reported an adverse effect of burning with a mild blister after moxibustion
 17 that resolved in two days. No serious adverse reactions were reported. The authors
 18 expressed concern about using moxa with related smoke in patients with lung cancer or
 19 other related pulmonary issues, but no pulmonary issues were reported in the trials. The
 20 authors concluded that the evidence is limited to suggest moxibustion is an effective
 21 supportive cancer care. All studies had a high risk of bias so there was not enough evidence
 22 to draw any conclusions.

23
 24 Coyle et al. (2012) examined the effectiveness and safety of moxibustion on changing the
 25 presentation of an unborn baby in the breech position. The inclusion criteria were published
 26 and unpublished randomized controlled trials comparing moxibustion (either alone or in
 27 combination with acupuncture or postural techniques) with a control group (no
 28 moxibustion), or other methods (e.g., external cephalic version, acupuncture, postural
 29 techniques) in women with a singleton breech presentation. This updated review now
 30 includes a total of eight trials (involving 1,346 women). Meta-analyses were undertaken
 31 (where possible) for the main and secondary outcomes. Moxibustion was not found to
 32 reduce the number of non-cephalic presentations at birth compared with no treatment.
 33 Moxibustion resulted in decreased use of oxytocin before or during labor for women who
 34 had vaginal deliveries compared with no treatment. Moxibustion was found to result in
 35 fewer non-cephalic presentations at birth compared to acupuncture. When combined with
 36 acupuncture, moxibustion resulted in fewer non-cephalic presentations at birth and fewer
 37 births by caesarean section compared with no treatment. When combined with a postural
 38 technique, moxibustion was found to result in fewer non-cephalic presentations at birth
 39 compared with the postural technique alone. The authors found limited evidence to support
 40 the use of moxibustion for correcting a breech presentation. Liao et al (2021) completed a
 41 systemic review and meta-analysis to evaluate the effectiveness and safety of moxibustion
 42 and acupuncture for correction of breech presentation. Sixteen randomized, controlled

1 trials with 2,555 participants were included. All the studies used moxibustion at acupoint
 2 Urinary Bladder 67. Moxibustion therapy significantly increased the number of cephalic
 3 presentations at birth especially in Asian populations compared with controls. Moxibustion
 4 and acupuncture effects were synergistic for correcting breech presentations. Four trials
 5 reported on adverse events which included either none, abdominal pain, throat issues, or
 6 unpleasant odor with or without nausea. The possibility of publication bias was noted as
 7 well as the small sample sizes of some of the studies and variation of the treatment
 8 application time and frequency. The authors suggested more clinical trials to evaluate
 9 whether our estimate of the magnitude of the effect of moxibustion remains constant.

10
 11 Chen et al. (2023) included 38 RCTs with 4,257 patients in a systematic review and meta-
 12 analysis of the use of nine moxibustion methods for treating allergic rhinitis. Overall, heat-
 13 sensitive moxa (moxa at specifically designated heat-sensitive points) was the most
 14 effective. Moxibustion on the needle was more effective than acupuncture alone.
 15 Moxibustion combined with medications was more effective at improving VAS scores and
 16 regulating serum IgE than medications alone. Adverse effects were mostly related to skin
 17 damage from vesiculating moxibustion. The authors note that there were also a few patients
 18 with mild skin burns and suggest that this is more of an issue with the provider's operation
 19 specifications. A small number of participants were allergic to moxa smoke. Limitations
 20 of the study included the many types of moxibustion studied, the variation in acupuncture
 21 points selected, and the acupuncturist's technique. The conclusion was that heat sensitive
 22 moxa can be used for people with allergic rhinitis if traditional medication is not
 23 appropriate.

24
 25 In a systematic review and meta-analysis, Yu et al. (2023) evaluated 8 randomized,
 26 controlled trials with six hundred and sixty-four patients with chronic prostatitis. Results
 27 showed moxibustion with an overall response rate that was greater than Western medical
 28 care or herbs. Study participants in the moxa group reported improved National Institute
 29 of Health-Chronic Prostatitis Symptom Index scores. The authors recommend additional
 30 studies of higher quality and longer duration.

31
 32 Xin et al. (2023) performed a systematic review and meta-analysis of 21 studies of knee
 33 osteoarthritis from 1964 to 2022 including over 1,000 participants. Participants receiving
 34 acupuncture and moxibustion showed statistically significant improvement over those only
 35 receiving acupuncture. Of the types of moxibustion used, fire needle was therapeutically
 36 superior.

37
 38 Meng et al. (2025) reviewed 32 RCTs with 2,814 patients with upper extremity pain
 39 disorder and motor impairment. Outcomes included pain scores on a Visual Analog Scale,
 40 the Fugle-Meye Assessment of the Upper Extremity, modified Barthel index or Barthel
 41 index, and National Institute of Health Stroke Scale. The control groups consisted of
 42 patients receiving rehabilitation training and the test group received rehabilitation training

1 and moxibustion. Better total effective rates were demonstrated in the rehab and moxa
2 groups vs. rehab only. Adverse events were similar in the control and test groups.

3
4 A systematic review and meta-analysis of 43 studies and 4,008 patients was performed by
5 Chen et al. (2025) to evaluate the effects of moxibustion on knee osteoarthritis. The Visual
6 Analogue Scale (VAS), Western Ontario and McMaster Universities Osteoarthritis index
7 (WOMAC), stiffness, physical function, and total effective rate were primary outcomes
8 with adverse events and treatment regimens as the secondary outcomes. Electronic
9 moxibustion was the most effective treatment. Treatments administered at frequencies of
10 more than 3 times a week were more effective than treatments provided less often. The
11 total effective rate was 93.11% for the moxibustion group and 76.41% for the control
12 groups. Adverse events were reported in 16 of the studies with only one serious adverse
13 event.

14
15 Xie et al. (2025) used 111 studies with 9,549 patients in a systematic review of acupuncture
16 various treatments for cancer pain. When moxibustion was added to usual care, the
17 Karnofsky performance status scale (KPS) improved. When moxibustion was added to
18 acupuncture and usual medicine, the incidence of dizziness decreased. The authors
19 concluded that the addition of moxibustion to standard medicine improved overall quality
20 of life the most. Usual care had a higher occurrence of adverse events compared to the
21 combination of usual care plus acupuncture, suggesting the incorporation of acupuncture
22 and moxibustion into standard care could decrease adverse events in patients. Additionally,
23 usual care with moxibustion was found to be safer than drug treatment alone.

24
25 Chen et al. (2024) completed a systematic review and network analysis of 57 reviews of
26 various Traditional Chinese Medicine interventions for primary dysmenorrhea. Sixteen of
27 the 57 studies were of moxibustion and included 651 participants. Pain outcome measures
28 were VAS and Numeric Rating Scale (NRS). Moxibustion was significantly more effective
29 for treating pain from primary dysmenorrhea than waitlist or NSAIDs. However, electro-
30 acupuncture, acupressure, oral contraceptives, and warm needling demonstrated higher
31 probabilities of being better interventions.

32 33 **PRACTITIONER SCOPE AND TRAINING**

34 Practitioners should practice only in the areas in which they are competent based on their
35 education, training, and experience. Levels of education, experience, and proficiency may
36 vary among individual practitioners. It is ethically and legally incumbent on a practitioner
37 to determine where they have the knowledge and skills necessary to perform such services
38 and whether the services are within their scope of practice.

It is best practice for the practitioner to appropriately render services to a member only if they are trained, equally skilled, and adequately competent to deliver a service compared to others trained to perform the same procedure. If the service would be most competently delivered by another health care practitioner who has more skill and training, it would be best practice to refer the member to the more expert practitioner.

Best practice can be defined as a clinical, scientific, or professional technique, method, or process that is typically evidence-based and consensus driven and is recognized by a majority of professionals in a particular field as more effective at delivering a particular outcome than any other practice (Joint Commission International Accreditation Standards for Hospitals, 2020).

Depending on the practitioner's scope of practice, training, and experience, a member's condition and/or symptoms during examination or the course of treatment may indicate the need for referral to another practitioner or even emergency care. In such cases it is prudent for the practitioner to refer the member for appropriate co-management (e.g., to their primary care physician) or if immediate emergency care is warranted, to contact 911 as appropriate. See the *Managing Medical Emergencies (CPG 159 – S)* clinical practice guideline for information.

REFERENCES

- Cardini, F., & Weixin, H. (1998). Moxibustion for correction of breech presentation: a randomized controlled trial. *JAMA*, 280(18), 1580–1584
- Chen K, Hou C, Liu C, Meng Y. Efficacy comparison of different moxibustion treatments for allergic rhinitis: A systematic review and Bayesian network meta-analysis. *Medicine* (Baltimore). 2023 Mar 3;102(9):e32997. doi: 10.1097/MD.00000000000032997. PMID: 36862898; PMCID: PMC9981372
- Chen S, Liu W, Liang C, Liu H, Wang P, Fu Q. Efficacy and safety of moxibustion for knee osteoarthritis: A systematic review and meta-analysis. *Complement Ther Clin Pract*. 2025 May;59:101979. doi: 10.1016/j.ctcp.2025.101979. Epub 2025 Mar 28. PMID: 40184698
- Chen SC, Ruan JY, Zhang B, Pang LY, Zhong L, Lin SL, Wong KP, Ouyang HX, Yeung WF, Fu QW, Chen BQ. Traditional Chinese medicine interventions based on meridian theory for pain relief in patients with primary dysmenorrhea: a systematic review and network meta-analysis. *Front Med (Lausanne)*. 2024 Sep 5;11:1453609. doi: 10.3389/fmed.2024.1453609. PMID: 39301491; PMCID: PMC11411804

- 1 Choi, T. Y., Kim, T. H., Kang, J. W., Lee, M. S., & Ernst, E. (2011). Moxibustion for
2 rheumatic conditions: a systematic review and meta-analysis. *Clinical*
3 *rheumatology*, 30(7), 937–945. <https://doi.org/10.1007/s10067-011-1706-5>
4
- 5 Choi, T. Y., Choi, J., Kim, K. H., & Lee, M. S. (2012). Moxibustion for the treatment of
6 osteoarthritis: a systematic review and meta-analysis. *Rheumatology*
7 *international*, 32(10), 2969–2978. <https://doi.org/10.1007/s00296-012-2367-7>
8
- 9 Choi, T. Y., Lee, M. S., Kim, J. I., & Zaslowski, C. (2017). Moxibustion for the treatment
10 of osteoarthritis: An updated systematic review and meta-analysis. *Maturitas*, 100, 33–
11 48. <https://doi.org/10.1016/j.maturitas.2017.03.314>
12
- 13 Coyle, M. E., Smith, C. A., & Peat, B. (2012). Cephalic version by moxibustion for breech
14 presentation. *The Cochrane database of systematic reviews*, (5), CD003928.
15 <https://doi.org/10.1002/14651858.CD003928.pub3>
16
- 17 Deng, H., & Shen, X. (2013). The mechanism of moxibustion: Ancient theory and modern
18 research. *Evidence-Based Complementary and Alternative Medicine*, 2013, 1-7.
19 <https://doi.org/10.1155/2013/379291>
20
- 21 Dharmananda, S. (2004). *Moxibustion: Practical considerations for modern use of an*
22 *ancient technique*. Retrieved June 16, 2021, from
23 <http://www.itmonline.org/arts/moxibustion.htm>
24
- 25 Furuse, N., Shinbara, H., Uehara, A., Sugawara, M., Yamazaki, T., Hosaka, M., &
26 Yamashita, H. (2017). A Multicenter Prospective Survey of Adverse Events Associated
27 with Acupuncture and Moxibustion in Japan. *Medical acupuncture*, 29(3), 155–162.
28 <https://doi.org/10.1089/acu.2017.1230>
29
- 30 Gadau, M., Yeung, W. F., Liu, H., Zaslowski, C., Tan, Y. S., Wang, F. C., Bangrazi, S.,
31 Chung, K. F., Bian, Z. X., & Zhang, S. P. (2014). Acupuncture and moxibustion for
32 lateral elbow pain: a systematic review of randomized controlled trials. *BMC*
33 *complementary and alternative medicine*, 14, 136. [https://doi.org/10.1186/1472-6882-](https://doi.org/10.1186/1472-6882-14-136)
34 14-136
35
- 36 Guo, Z., & Cheng, M. (1998). Treatment of tennis elbow by acupuncture and moxibustion.
37 *Journal of Traditional Chinese Medicine*, 18(4), 304-307
38
- 39 Ji, J., Lu, Y., Liu, H., Feng, H., Zhang, F., Wu, L., Cui, Y., & Wu, H. (2013). Acupuncture
40 and moxibustion for inflammatory bowel diseases: a systematic review and meta-
41 analysis of randomized controlled trials. *Evidence-based complementary and*
42 *alternative medicine : eCAM*, 2013, 158352

- 1 Jun JH, Choi TY, Park S, Lee MS. Warm needle acupuncture for osteoarthritis: An
2 overview of systematic reviews and meta-analysis. *Front Med (Lausanne)*. 2023 Mar
3 14;10:971147. doi: 10.3389/fmed.2023.971147. PMID: 36999074; PMCID:
4 PMC10043310
- 5
- 6 Kim, S., Chae, Y., Lee, S., Lee, H., & Park, H. (2011). The effectiveness of moxibustion:
7 An overview during 10 years. *Evidence-Based Complementary and Alternative*
8 *Medicine*, 2011, 1-19. <https://doi.org/10.1093/ecam/nep163>
- 9
- 10 Kim, T. H., Kim, K. H., Kang, J. W., Lee, M., Kang, K. W., Kim, J. E., Kim, J. H., Lee,
11 S., Shin, M. S., Jung, S. Y., Kim, A. R., Park, H. J., Jung, H. J., Song, H. S., Kim, H.
12 J., Choi, J. B., Hong, K. E., & Choi, S. M. (2014). Moxibustion treatment for knee
13 osteoarthritis: a multi-centre, non-blinded, randomised controlled trial on the
14 effectiveness and safety of the moxibustion treatment versus usual care in knee
15 osteoarthritis patients. *PloS one*, 9(7), e101973.
16 <https://doi.org/10.1371/journal.pone.0101973>
- 17
- 18 Lee, M. S., Choi, T. Y., Kang, J. W., Lee, B. J., & Ernst, E. (2010). Moxibustion for treating
19 pain: a systematic review. *The American journal of Chinese medicine*, 38(5), 829–838.
20 <https://doi.org/10.1142/S0192415X1000827>
- 21
- 22 Lee, S., Jerng, U. M., Liu, Y., Kang, J. W., Nam, D., & Lee, J. D. (2014). The effectiveness
23 and safety of moxibustion for treating cancer-related fatigue: a systematic review and
24 meta-analyses. *Supportive care in cancer : official journal of the Multinational*
25 *Association of Supportive Care in Cancer*, 22(5), 1429–1440.
26 <https://doi.org/10.1007/s00520-014-2161-z>
- 27
- 28 Lee, M. S., Choi, T. Y., Park, J. E., Lee, S. S., & Ernst, E. (2010). Moxibustion for cancer
29 care: a systematic review and meta-analysis. *BMC cancer*, 10, 130.
30 <https://doi.org/10.1186/1471-2407-10-130>
- 31
- 32 Liao, J. A., Shao, S. C., Chang, C. T., Chai, P. Y., Owang, K. L., Huang, T. H., Yang, C.
33 H., Lee, T. J., & Chen, Y. C. (2021). Correction of Breech Presentation with
34 Moxibustion and Acupuncture: A Systematic Review and Meta-Analysis. *Healthcare*
35 *(Basel, Switzerland)*, 9(6), 619. <https://doi.org/10.3390/healthcare9060619>
- 36
- 37 Liu, L. Y., Li, X. J., Wei, W., Guo, X. L., Zhu, L. H., Gao, F. F., Liang, F. R., Yu, S. Y.,
38 & Yang, J. (2020). Moxibustion for Patients with Primary Dysmenorrhea at Different
39 Intervention Time Points: A Randomized Controlled Trial. *Journal of pain*
40 *research*, 13, 2653–2662. <https://doi.org/10.2147/JPR.S270698>

- 1 Meng X, Sun J, Su X, Seto DJ, Wang L, Li Y, Yu H, Zhao B, Zhao J. Efficacy and safety
2 of moxibustion treatment for upper extremity pain disorder and motor impairment in
3 patients with stage I post-stroke shoulder-hand syndrome: a systematic review and
4 meta-analysis of randomized controlled trials. *Front Neurol*. 2025 May 23;16:1530069.
5 doi: 10.3389/fneur.2025.1530069. PMID: 40488201; PMCID: PMC12140999
6
- 7 Moon, S. K., Whang, Y. K., Park, S. U., Ko, C. N., Kim, Y. S., Bae, H. S., & Cho, K. H.
8 (2003). Antispastic effect of electroacupuncture and moxibustion in stroke
9 patients. *The American journal of Chinese medicine*, 31(3), 467–474.
10 <https://doi.org/10.1142/S0192415X03001077>
11
- 12 Park, J. W., Lee, B. H., & Lee, H. (2013). Moxibustion in the management of irritable
13 bowel syndrome: systematic review and meta-analysis. *BMC complementary and*
14 *alternative medicine*, 13, 247. <https://doi.org/10.1186/1472-6882-13-247>
15
- 16 Park, J. E., Lee, S. S., Lee, M. S., Choi, S. M., & Ernst, E. (2010). Adverse events of
17 moxibustion: a systematic review. *Complementary therapies in medicine*, 18(5), 215–
18 223. <https://doi.org/10.1016/j.ctim.2010.07.001>
19
- 20 Singh, H., Chetha, A. S., & Shalikaar, H. (2020). Moxibustion-septic shock and necrotizing
21 fasciitis. *IDCases*, 22, e00990. <https://doi.org/10.1016/j.idcr.2020.e00990>
22
- 23 Stein D. J. (2017). Massage Acupuncture, Moxibustion, and Other Forms of
24 Complementary and Alternative Medicine in Inflammatory Bowel
25 Disease. *Gastroenterology clinics of North America*, 46(4), 875–880.
26 <https://doi.org/10.1016/j.gtc.2017.08.015>
27
- 28 Tan, Y., Hu, J., Pang, B., Du, L., Yang, Y., Pang, Q., Zhang, M., Wu, Q., Zhang, Y., & Ni,
29 Q. (2020). Moxibustion for the treatment of diabetic peripheral neuropathy: A
30 systematic review and meta-analysis following PRISMA guidelines. *Medicine*, 99(39),
31 e22286. <https://doi.org/10.1097/MD.00000000000022286>
32
- 33 Thorne, T. L., Hanes, D. A., Wild, H., & Colbert, A. (2014). Direct moxibustion to treat
34 spleen qi and yang deficiency fatigue: a pilot study. *Journal of acupuncture and*
35 *meridian studies*, 7(2), 76–82. <https://doi.org/10.1016/j.jams.2013.04.003>
36
- 37 Tian, R., Zhang, X., Li, S. Y., Aixinjueluo, Q. Y., Lam, W. C., & Bian, Z. X. (2020).
38 Reporting quality of systematic reviews with moxibustion. *Chinese medicine*, 15, 104.
39 <https://doi.org/10.1186/s13020-020-00385-z>

- 1 Weiner, D. K., & Ernst, E. (2004). Complementary and alternative approaches to the
2 treatment of persistent musculoskeletal pain. *Clinical Journal of Pain*, 20(4), 244-255
3
- 4 Wu Q, Hu H, Han D, Gao H. Efficacy and Safety of Moxibustion for Postherpetic
5 Neuralgia: A Systematic Review and Meta-Analysis. *Front Neurol*. 2021 Aug
6 26;12:676525. doi: 10.3389/fneur.2021.676525. PMID: 34512502; PMCID:
7 PMC8427698
8
- 9 Xie T, Liu C, Wu Y, Li X, Yang Q, Tan J. Efficacy and Safety of Different Acupuncture
10 Treatments for Cancer-Related Pain: A Systematic Review and Network Meta-
11 Analysis. *Integr Cancer Ther*. 2025 Jan-Dec;24:15347354251314500. doi:
12 10.1177/15347354251314500. PMID: 39873173; PMCID: PMC11773549
13
- 14 Xin S, Liu J, Yang Z, Li C. Comparative effectiveness of moxibustion and acupuncture for
15 the management of osteoarthritis knee: A systematic review and meta-analysis.
16 *Heliyon*. 2023 Jul 4;9(7):e17805. doi: 10.1016/j.heliyon.2023.e17805. PMID:
17 37449100; PMCID: PMC10336830. Yamashita, H., Tsukayama, H., Tanno, Y., &
18 Nishijo, K. (1999). Adverse events in acupuncture and moxibustion treatment: A six-
19 year survey at a national clinic in Japan. *Journal of Alternative and Complementary*
20 *Medicine*, 5(3), 229-236
21
- 22 Yao, F., Zhang, Y., Kuang, X., Zhou, Q., Huang, L., Peng, J., & Du, S. (2020).
23 Effectiveness and Safety of Moxibustion on Constipation: A Systematic Review and
24 Meta-Analysis. *Evidence-based complementary and alternative medicine : eCAM*, 2020, 8645727
25
26
- 27 Yao Y, Zhenni Z, Fengqin C, Yufei L, Xiangtian P, Xiao XU, Zhiling S. Effectiveness of
28 moxibustion alone on lumbar disc herniation: a Metaanalysis of randomized controlled
29 trials. *J Tradit Chin Med*. 2023 Feb;43(1):14-26. Doi:
30 10.19852/j.cnki.jtcm.20221108.001. PMID: 36639991; PMCID: PMC9924778
31
- 32 Yin S, Zhu F, Li Z, Che D, Li L, Feng J, Zhang L, Huo Z. An Overview of Systematic
33 Reviews of Moxibustion for Knee Osteoarthritis. *Front Physiol*. 2022 Feb 3;13:822953.
34 doi: 10.3389/fphys.2022.822953. PMID: 35185621; PMCID: PMC8850775
35
- 36 Yu XW, Wang CS, Yu XH. A systematic review and meta-analysis of moxibustion for
37 chronic prostatitis. *Medicine (Baltimore)*. 2023 Dec 15;102(50):e36742. doi:
38 10.1097/MD.00000000000036742. PMID: 38115243; PMCID: PMC10727555.

- 1 Yu, Z., Wang, Y., Li, Y., Liao, C., Dai, J., Luo, Y., Hu, Y., Tao, S., Tang, J., Chen, G., &
2 Wu, P. (2020). Effect of Moxibustion on the Serum Levels of MMP-1, MMP-3, and
3 VEGF in Patients with Rheumatoid Arthritis. *Evidence-based complementary and
4 alternative medicine : eCAM*, 2020, 7150605. <https://doi.org/10.1155/2020/7150605>
5
- 6 Yuan, Q. L., Guo, T. M., Liu, L., Sun, F., & Zhang, Y. G. (2015). Traditional Chinese
7 medicine for neck pain and low back pain: a systematic review and meta-analysis. *PloS
8 one*, 10(2), e0117146. <https://doi.org/10.1371/journal.pone.0117146>
9
- 10 Zhao, L., Cheng, K., Wang, L., Wu, F., Deng, H., Tan, M., Lao, L., & Shen, X. (2014).
11 Effectiveness of moxibustion treatment as adjunctive therapy in osteoarthritis of the
12 knee: a randomized, double-blinded, placebo-controlled clinical trial. *Arthritis
13 research & therapy*, 16(3), R133. <https://doi.org/10.1186/ar4590>
14
- 15 Zhang, X., Tan, R., Lam, W. C., Cheng, C. W., Yao, L., Wang, X. Q., Li, S. Y.,
16 Aixinjueluo, Q. Y., Yang, K. H., Shang, H. C., Wu, T. X., Lyu, A. P., & Bian, Z. X.
17 (2020). PRISMA extension for moxibustion 2020: recommendations, explanation, and
18 elaboration. *Systematic reviews*, 9(1), 247. <https://doi.org/10.1186/s13643-020-01502-7>
19