

1 **Clinical Practice Guideline: Acupuncture for the Treatment of**
2 **Abdominal/Pelvic Pain**

3
4 **Date of Implementation: April 15, 2010**

5
6 **Product: Specialty**
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8
9 **GUIDELINES**

10 American Specialty Health – Specialty (ASH) considers the use of acupuncture for the
11 treatment of abdominal/pelvic pain (e.g., bladder pain syndrome, dysmenorrhea; pain
12 related to gastrointestinal disorders, including irritable bowel syndrome (IBS),
13 gastroesophageal reflux disease (GERD), inflammatory bowel disease (IBD); functional
14 dyspepsia) as reasonable and appropriate when:

- 15 • Other evidence-based interventions have been deemed unsuccessful or
16 contraindicated;
- 17 • The acupuncture treatment is in combination with, and complementary to, other
18 treatment strategies; and
- 19 • There is medical oversight of the underlying condition for which the physician
20 retains primary responsibility for patient management.

21
22 The evidence supporting acupuncture treatment for pain associated with these
23 abdominal/pelvic conditions is relatively low quality, ranging from promising to
24 preliminary and insufficient to inconclusive. However, there is no strong evidence that
25 acupuncture is ineffective in treating the pain associated with these disorders; and the safety
26 profile of acupuncture is such that a trial of care could be considered reasonable when the
27 above criteria are met.

28
29 This guideline does not pertain to premenstrual syndrome (PMS) or premenstrual
30 dysphoric disorder (PMDD), menstrual irregularities, and/or fertility issues.

1 **Diagnosis Codes and Descriptions**

ICD-10 Code	ICD-10 Code Description
N94.4	Primary dysmenorrhea
N94.5	Secondary dysmenorrhea
N94.6	Dysmenorrhea, unspecified
R10.10	Upper abdominal pain, unspecified
R10.11	Right upper quadrant pain
R10.12	Left upper quadrant pain
R10.13	Epigastric pain
R10.2	Pelvic and perineal pain
R10.30	Lower abdominal pain, unspecified
R10.31	Right lower quadrant pain
R10.32	Left lower quadrant pain
R10.33	Periumbilical pain
R10.84	Generalized abdominal pain

2

3 **DESCRIPTION/BACKGROUND**

4 Functional gastrointestinal and motility disorders are the most common gastrointestinal
5 (GI) disorders in the general population and include dyspepsia, irritable bowel syndrome
6 (IBS), functional heartburn, gastroesophageal reflux disease (GERD), and chronic
7 constipation. Symptoms are often chronic (> 3 months in a year), frequent (> 3 episodes
8 per week) and severe. Functional GI symptoms are multifactorial disorders; different
9 pathophysiological mechanisms are variably combined in different patients (Takahashi,
10 2006). Motor dysfunction of the GI tract and visceral hypersensitivity are considered to be
11 important factors. Inflammatory bowel disease (IBD), a group of disorders in which the
12 colon or small intestine become inflamed (most likely as a result of an autoimmune reaction
13 of the body against its own intestinal tissue), includes Crohn's disease and ulcerative
14 colitis, affects over one million patients in the United States, and has been reported in all
15 continents (Huo et al., 2009).

16

17 Chronic pelvic pain (CPP) is defined as noncyclic pain of more than 6 months that localizes
18 in the pelvis, the anterior abdominal wall at or below the umbilicus, the lumbosacral region
19 of the spine, or the buttocks. Severe CPP not only causes functional disability in patients,
20 but also reduces quality of life (Sung et al., 2018). The causes of CPP are complicated and
21 not entirely understood, but may include pelvic congestion, adhesions, musculoskeletal
22 nerve-related disorders, and psychosomatic factors. Interventions targeting these factors
23 have been used in the management of CPP. The majority of women who experience CPP

Page 2 of 25

CPG 131 Revision 14 – S

Acupuncture for the Treatment of Abdominal/Pelvic Pain

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1 have musculoskeletal system dysfunction. These issues could include postural changes, as
2 well as changes in the pelvic muscles, such as spasm of the levator ani (Prendergast and
3 Weiss, 2003). Given the potential that psychosocial components may influence the
4 presence of CPP, psychological treatments may be helpful in addition to medical and/or
5 surgical treatments. Williams et al. (2012, 2020) noted that psychological treatments can
6 help reduce frequency and severity of symptoms for chronic pain in general, including
7 CPP. Another potential disorder causing pelvic pain is chronic prostatitis/chronic pelvic
8 pain syndrome (CP/CPPS). This is a common disorder with symptoms of pelvic pain and
9 lower urinary tract symptoms. There are currently many approaches for its management,
10 using both pharmacological and non-pharmacological interventions (Franco et al., 2018).

11
12 Primary dysmenorrhea can also be considered pelvic pain and is defined as cramping pain
13 during menstruation without any identifiable pelvic pathology, and it affects most women
14 throughout the menstrual years. This condition is very common and can impact daily
15 activities for many women who experience this pain. In the consensus guidelines of
16 primary dysmenorrhea, nonsteroidal anti-inflammatory drugs (NSAIDs) and oral
17 contraceptives (OCs) are recommended as first-line treatments. However, some patients
18 did not experience pain reduction with NSAIDs and did experience side effects such as
19 nausea, dyspepsia, headache, or drowsiness. In addition, OCs would not be suitable for
20 patients attempting to become pregnant, and might cause adverse effects such as nausea,
21 vomiting, weight gain, or vaginal bleeding (Woo et al., 2018). Endometriosis is a chronic,
22 estrogen-dependent, inflammatory disease that affects women of reproductive-age. It is
23 painful and may cause infertility. Current pain therapies often involve various
24 pharmacological and surgical treatments. Unfortunately, these treatments may not alleviate
25 the pain and may present side effects that are difficult to manage (Xu et al., 2017). Pelvic
26 pain can also occur during pregnancy. Almost 1/5 of pregnant women experience pelvic
27 pain and symptoms will typically increase with advancing pregnancy. Low back pain can
28 also occur with pelvic pain. Symptoms can interfere with activities of daily living, sleep,
29 and work (Liddle and Pennick, 2015).

30
31 Bladder pain syndrome/interstitial cystitis is another disorder described as pelvic pain,
32 pressure or discomfort perceived to be related to the bladder, lasting for at least 6 months,
33 and accompanied by at least one other urinary symptom. Urinary symptoms include the
34 frequency or persistent urge to void without any identifiable causes. The International
35 Urogynecological Association (IUGA) and the International Continence Society (ICS)
36 produced a joint report on terminologies by Haylen et al. in 2010, defining bladder pain as
37 a complaint of supra pubic or retro-pubic pressure, discomfort, or pain, associated with the
38 bladder, generally aggravated by bladder filling. The symptom may also persist after
39 voiding (Verghese et al., 2016).

1 EVIDENCE REVIEW

2 Irritable Bowel Syndrome (IBS) and Inflammatory Bowel Disease (IBD)

3 Lim and colleagues (Lim et al., 2006) wanted to determine whether acupuncture is more
 4 effective than no treatment, more effective than ‘sham’ (placebo) acupuncture, and as
 5 effective as other interventions used to treat irritable bowel syndrome. They conducted a
 6 comprehensive search irrespective of language, date of publication, and publication status.
 7 Two scales were used to assess the methodological quality of the studies (Jadad et al., 1996;
 8 Linde et al., 1996A; Linde et al., 1996B; Linde et al., 1997), and very well-defined
 9 inclusion / exclusion criteria were used. Out of 12 potentially eligible studies identified,
 10 only six were included (Fireman et al., 2001; Forbes et al., 2005; Liao, 2000; Lowe et al.,
 11 2000; Liu, 1995; Liu, 1997); representing about 464 IBS patients (221 males; 244 females);
 12 ages ranged between 16-79 years; while duration of IBS symptoms prior to enrollment
 13 ranged from 3 months to 32 years. The studies used different IBS assessment criteria,
 14 varied in treatment duration, and used heterogeneous acupuncture protocols. The authors
 15 concluded that “given the poor quality of the studies, there is no evidence to support the
 16 use of acupuncture for treating IBS; therefore, neither positive nor negative
 17 recommendations can be made based on this review.” The authors suggested the need for
 18 further studies and recommended that researchers follow CONSORT (Begg et al., 1996)
 19 and STRICTA (MacPherson et al., 2001) guidelines to improve the quality of studies, that
 20 they follow standard outcome measures, and continue to work on the development of
 21 proper protocols for placebo acupuncture (Streitberger et al., 1998). The review by
 22 Schneider and colleagues (2007) identified 18 relevant trials, but only 4 had robust RCT
 23 design: two trials for IBS (Forbes et al., 2005; Schneider et al., 2005), one on Crohn’s
 24 disease (Joos et al., 2004), and one on ulcerative colitis (Joos et al., 2006). Additional IBS
 25 trials (Rohrböck et al., 2004; Xiao et al., 2004; Fireman et al., 2001; Chan et al., 1997;
 26 Kunze et al., 1990) and additional ulcerative colitis trials (Yang et al., 1999, Yue et al.,
 27 2005) were also included. The authors concluded there are only a few clinical trials of
 28 acupuncture for gastrointestinal disorders (available in English), and that only 4 are well
 29 designed, strong RCTs. The trials of higher methodological quality looked at acupuncture
 30 for IBS (Forbes et al., 2005; Schneider et al., 2005) and IBD (Joos et al., 2004; Joos et al.,
 31 2006). For both IBS and IBD conditions, health related quality of life (QoL) improved
 32 remarkably after acupuncture. Altogether, in all trials where QoL or subjective symptoms
 33 were assessed, QoL/subjective symptoms improved in both the acupuncture and the sham
 34 acupuncture groups without significant group differences. However, for Crohn’s disease
 35 and colitis, real acupuncture was significantly superior to sham acupuncture with regards
 36 to disease activity. Subgroup analyses in both studies revealed that higher activity grades
 37 and disease duration of less than 5 years seem to correlate with the efficacy of acupuncture
 38 therapy. The authors stated that “because most trials are hampered by major
 39 methodological deficits, it is not possible to draw sure conclusions for (acupuncture) trials
 40 of gastrointestinal conditions.”

1 The reviewers note that in IBS all interventions, acupuncture (standardized or
2 individualized), and sham acupuncture control (invasive vs. non-invasive), improvement
3 of QoL was achieved. They conclude that this effect is similar to effect sizes achieved with
4 psychotherapeutic interventions and antidepressants, and that it can be interpreted as
5 psychological effect, due in part to incidental effects of acupuncture. In contrast, the
6 authors conclude that the studies of acupuncture for IBD (Joos et al., 2004; Joos et al.,
7 2006) point to some specific effects of acupuncture, and that “further trials would be
8 necessary to evaluate specific vs. nonspecific effects of acupuncture in the treatment of
9 gastrointestinal disorders.” Three additional studies have been published on acupuncture
10 and IBS; two smaller preliminary studies (Reynolds et al., 2008; Anastasi et al., 2009) and
11 a large RCT (Lembo et al., 2009). Reynolds and colleagues (2008) conducted a pragmatic
12 RCT of 30 patients with IBS comparing 10 sessions of acupuncture as a package of care
13 (including moxibustion, and recommendations on diet, exercise, and relaxation) along with
14 usual general practitioner (GP) care vs. usual GP care alone. A statistically and clinically
15 significant difference was found between groups in favor of acupuncture (P=0.001).
16 Another small randomized, sham/placebo-controlled trial (n=29) recently published by
17 Anastasi et al. (2009) assessed the effect of an individualized traditional Chinese medicine
18 (TCM) acupuncture and moxibustion (Acu/Moxa) treatment plan as compared to a minimal
19 acupuncture treatment plan at non-acupuncture points including sham moxa. After 4 weeks
20 of treatment, the Acu/Moxa intervention was significantly more effective in improving
21 symptoms.

22
23 Lembo et al. (2009) compared acupuncture vs. sham acupuncture in a trial ‘nested’ within
24 a larger study examining the impact of the patient – practitioner interaction in 230 IBS
25 patients. Although there was no statistically significant difference between acupuncture
26 and sham acupuncture on the primary IBS outcome measures, both groups improved
27 significantly compared with the waitlist control group. For several secondary outcome
28 measures, within each treatment condition (augmented or limited), none of the acupuncture
29 vs. sham acupuncture differences were statistically significant. Chao and Zhang (2014)
30 performed a meta-analysis consisting of six studies of acupuncture treatment for irritable
31 bowel that met inclusion criteria. The meta-analysis overall showed a positive result, but
32 only one study was positive out of the six. This study was much larger in participant
33 numbers than the five smaller negative studies. Overall small sample sizes, differing
34 treatment modes and durations and assessments of improvement made the positive results
35 less reliable. The authors recommended further study before conclusions are drawn.
36 Manheim et al. (2012) in a Cochrane Review performed a meta-analysis of 17 RCTs
37 including 1,806 patients. There was no evidence of improvement with acupuncture
38 treatment vs. sham acupuncture for IBS symptoms or quality of life. Acupuncture was
39 significantly more effective than pharmacological therapy and no treatment. Sixty-three
40 percent of the patients in the acupuncture treatment group showed symptomatic
41 improvement compared with 34% improved in the no treatment group.

1 Chao and Zhang (2014) performed a meta-analysis that included six randomized, placebo-
2 controlled qualified studies of acupuncture treatment of IBS. This meta-analysis suggested
3 that acupuncture is effective in controlling the symptoms of IBS including abdominal pain
4 and distention as well as abnormal frequency of defecation. Five of the six studies did not
5 show a positive effect. The overall effect was positive due to the large number of subjects
6 in the one positive trial. The authors commented that the results were not enough to
7 recommend acupuncture as a first line therapy and that further studies were needed. Park
8 et al. (2013) performed a systematic review of moxibustion treatment of IBS. Twenty
9 studies were included. Moxibustion did show positive effects on IBS, but there were biases
10 and inconsistencies in the studies. Further study was indicated. MacPherson et al. (2012)
11 conducted a RCT with 233 patients with IBS comparing usual care alone and combined
12 with acupuncture treatments. Acupuncture provided a significant benefit over usual care
13 alone and the effect was continued over the 12-month follow-up period based on results
14 from the IBS Symptoms Severity Score. Ji et al. (2013) reported a meta-analysis including
15 10 trials showing that acupuncture alone or with moxibustion was superior to oral
16 sulfasalazine therapy for IBD. The study authors recommended that double blind RCTs
17 with large sample sizes are needed to provide high quality evidence regarding the efficacy
18 of acupuncture and moxibustion for the treatment of IBD. Liu et al. (2016) reported the
19 results of a RCT using electro-acupuncture for chronic severe functional constipation in
20 over 1,075 patients. The authors noted that after 8 weeks of treatment, the primary outcome
21 (complete spontaneous bowel movements) was increased and persisted through to the 12-
22 week follow-up. Lowe et al. (2017) completed a randomized placebo-controlled trial that
23 determined that sham acupuncture is as efficacious as true acupuncture for the treatment
24 of IBS. Patients received twice weekly true acupuncture for 4 weeks ($n=43$) or sham
25 acupuncture ($n=36$). Patients returned at 12 weeks for a follow-up review. The primary
26 endpoint of success was determined by whether patients met or exceeded their established
27 goal for percentage symptom improvement. Questionnaires were completed for symptom
28 severity scores, SF-36 and IBS-36 QOL tools, McGill pain score, and Pittsburg Sleep
29 Quality Index. A total of 53% in the true acupuncture group met their criteria for a
30 successful treatment intervention, but this did not differ significantly from the sham group
31 (42%). IBS symptom scores similarly improved in both groups. Authors suggested that the
32 lack of differences in symptom outcomes between sham and true treatment acupuncture
33 suggests that acupuncture does not have a specific treatment effect in IBS. MacPherson et
34 al. (2017) extended a trial follow-up to evaluate the effects of acupuncture at 24 months
35 post-randomization. Authors concluded that there were no statistically significant
36 differences between the acupuncture and usual care groups in IBS signs and symptoms at
37 24 months post-randomization, and the point estimate for the mean difference was
38 approximately 80% of the size of the statistically significant results seen at 6, 9 and 12
39 months.

40
41 In a systematic review and meta-analysis by Guo et al. (2020), acupuncture was shown to
42 be more effective than loperamide for managing defecation frequencies in patients with

1 diarrhea-prominent IBS. Acupuncture also resulted in better scores on the IBS Quality of
2 Life, and IBS Symptom Severity Scale, and reduced recurrence rates compared with the
3 dicetel, tribebutine and bacillus licheniformis/deanxit treatment groups. There were more
4 adverse events with acupuncture, but the events were all mild bleeding at needling sites.

5
6 In a randomized, controlled study, Pei, et al (2020), compared acupuncture with
7 polyethylene glycol and pinaverium bromide for the treatment of irritable bowel syndrome.
8 The primary endpoint of total IBS-Symptom Severity Score showed significantly more
9 improvement with the acupuncture treatment than with the medications after six weeks.

10
11 Ma et al. (2020) utilized functional MRI (fMRI) to look at brain functioning of patients
12 with diarrhea-dominant IBS before and after acupuncture. Abnormal brain connections that
13 were different between normal subjects and patients with IBS were improved after
14 acupuncture. The improvement on fMRI correlated with clinical improvement and IBS
15 symptom severity scores.

16
17 Dai et al. (2020) reviewed 40 RCTs with over 4,000 participants and noted that acupuncture
18 and cognitive behavioral therapy were more effective for treating IBS than
19 pharmaceuticals. Acupuncture was the most effective therapy for improving overall
20 clinical treatment efficacy and reducing adverse events. Wang et al. (2020) performed a
21 systematic review and meta-analysis of acupuncture treatment for ulcerative colitis.
22 Acupuncture was shown to be effective when compared to pharmaceutical management
23 and when combined with medications. There were no significant differences in the adverse
24 effects between medications and acupuncture. The authors recommended caution with any
25 conclusions because of the low number of trials available and the generally poor
26 methodological quality of the studies reviewed.

27
28 Wang et al. (2021) performed a systematic review and meta-analysis of 61 RCTs.
29 Acupuncture treatments for functional gastrointestinal disorders were compared to
30 pharmacotherapy, placebo acupuncture, no treatment, and acupuncture as an adjunctive to
31 other therapies (Chinese herbal therapies or pharmacotherapy). Acupuncture improved
32 symptom severity in functional dyspepsia, irritable bowel syndrome and functional
33 constipation better than pharmacotherapy, placebo, or no treatment. Acupuncture used as
34 an adjunctive treatment was better than other therapies alone. Adverse events were lowest
35 with acupuncture treatments than the other treatment modalities.

36
37 A systematic review (Amsallem et al., 2021) of non-pharmacological interventions for
38 irritable bowel included 5 studies of acupuncture. One study showed a significant
39 improvement in overall symptoms compared with standard medical treatment
40 (antidiarrheals, laxatives, antispasmodics) at 3- and 6-month follow-up evaluations, but not
41 at 12 months. Another study found better symptomatic improvement with acupuncture over
42 standard medical treatment (SMT) at 3-month follow-up. Two studies found no significant

1 differences in results between acupuncture treatments and sham acupuncture. One study
2 compared auriculotherapy and sham and demonstrated no difference between the two in
3 treating abdominal pain. Only mild, transient adverse events were noted with acupuncture
4 therapies. The author recommends further study of acupuncture with better quality RCTs
5 and well-defined control groups.

6
7 Ten RCTs with fMRI data for acupuncture in functional gastrointestinal disorders
8 (functional dyspepsia, irritable bowel, and functional constipation) were reviewed by
9 Wang et al. (2023). Acupuncture significantly improved symptoms of these functional
10 disorders including pain, distension, stool frequency/character, and anxiety/depression
11 symptoms. The hypothesized mechanism of acupuncture's effects was through regulation
12 of functional connectivity and activity in areas of the brain that are involved with visceral
13 sensation, pain, and emotions.

14 **Gastroesophageal Reflux Disease (GERD)**

15 A single randomized controlled trial (Dickman et al., 2007) examined acupuncture as an
16 adjunct to standard care for gastro-esophageal reflux. Two additional trials assessed
17 acupuncture for dyspepsia; one compared the use of classical acupuncture points to non-
18 channel points in treating functional dyspepsia (Park et al., 2009); the other looked at
19 acupuncture for the treatment of dyspepsia during pregnancy (da Silva et al., 2009).
20 Dickman and colleagues (2007) randomized 30 patients with classic heartburn symptoms
21 (minimum 3 months and 2 episodes per week) who continued to be symptomatic on
22 standard-dose proton pump inhibitors to one of two groups, either adding acupuncture
23 along with a proton pump inhibitor or doubling the proton pump inhibitor dose over a
24 period of 4 weeks. Acupuncture augmentation was significantly more effective than
25 doubling the proton pump inhibitor dose in controlling gastroesophageal reflux disease-
26 related symptoms in patients who failed standard-dose. Park et al. (2009) compared 2
27 weeks of needling acupoints versus needling non-channel points in 68 patients with
28 functional dyspepsia (FD). Both treatments significantly improved symptoms of FD and
29 QoL compared to baseline, but there were no differences in the average between groups,
30 except for two specific symptoms: pressure in upper abdomen and cramps in upper
31 abdomen, where needling acupoints outperformed the control group. da Silva et al. (2009)
32 conducted a study of pregnant women ($n=42$) randomized to receive or not receive
33 additional acupuncture for the treatment of heartburn during pregnancy. Significant
34 improvements in heartburn and other symptoms (eating and sleeping) were found in the
35 women receiving acupuncture.

36
37
38 Zheng et al. (2013) performed a study of acupuncture which included 200 participants with
39 functional dyspepsia. One group of participants received sham acupuncture and the other
40 true acupuncture. Twenty sessions of acupuncture treatments were given over 4 weeks.
41 The primary outcome was absence of dyspepsia symptoms at 16 weeks. Secondary
42 outcomes were the short form Leid's Dyspepsia Questionnaire and the Nepean Dyspepsia

1 index. Both groups received education about lifestyle changes to improve functional
2 dyspepsia. Patients with functional dyspepsia responded to the true acupuncture treatments
3 (46%) and to the sham acupuncture (14%). In a 2014 Cochrane review of 7 studies, there
4 was no benefit of acupuncture treatments over medication for functional dyspepsia.
5 Acupuncture was as equally effective as or better than sham acupuncture. All evidence was
6 of low quality and did not allow for a definitive conclusion about acupuncture's safety or
7 efficacy in treating functional dyspepsia. Zhu et al. (2017) explored the effectiveness of
8 acupuncture for the treatment of GERD. A total of 12 trials involving 1,235 patients were
9 included. Meta-analyses demonstrated that patients receiving acupuncture or
10 electroacupuncture combined with Western Medicine (WM) had superior global symptom
11 improvement compared with those receiving WM alone. The authors' meta-analysis
12 suggested that acupuncture is an effective and safe treatment for GERD. However, due to
13 the small sample size and poor methodological quality of the included trials, further studies
14 are required to validate conclusions.

15
16 Guo et al. (2020) completed a systematic search of the literature for randomized controlled
17 trials about effectiveness of acupuncture and electroacupuncture for functional dyspepsia.
18 Eight studies were included. Acupuncture and electroacupuncture showed positive effects
19 on the regulation of gastric motility, accommodation, hormones, and central and autonomic
20 functions. Dyspepsia and quality of life improved with the treatments. The authors
21 recommended that further high-quality studies be completed for additional evidence.

22
23 Through a systematic review and meta-analysis, Mao et al. (2020) found that
24 electroacupuncture was more effective at treating functional dyspepsia than sham
25 electroacupuncture and had fewer side effects than medications.

26
27 Zhang et al. (2020) performed a network meta-analysis to evaluate which forms of
28 acupuncture (manual, acupoint application, moxibustion, acupoint catgut embedding, and
29 warm acupuncture) were most helpful in treating functional dyspepsia. All forms of
30 acupuncture were more effective at improving the symptoms of functional dyspepsia
31 compared with prokinetics and sham acupuncture. Manual and electroacupuncture were
32 the most effective for improving SF-36 scores. Moxibustion and manual acupuncture were
33 the best at improving scores on the Nepean Dyspepsia Life Quality Index.

34
35 A randomized clinical trial by Yang et al. (2020) used 4 weeks of treatment with
36 acupuncture vs. sham acupuncture to measure the overall treatment effect and elimination
37 rate of the 3 primary symptoms of post-prandial distress: postprandial fullness, upper
38 abdominal bloating, and early satiety. The response rate at 4 weeks was 83% in the
39 acupuncture group and 51.6% in the sham group. The elimination rate of the primary
40 symptoms was 27.8% for acupuncture and 17.3% in the sham group. The efficacy of
41 acupuncture was still present at 16-week follow-up.

1 Sun et al. (2021) studied the effect of acupuncture with and without deqi on the symptoms
 2 of functional dyspepsia and on fMRIs of the amygdala. Acupuncture with deqi showed a
 3 significantly greater difference in Nepean Dyspepsia Symptom Index when compared to
 4 acupuncture with deqi. The changes in the symptoms were consistent with alterations in
 5 fMRI results in the right centro-medial amygdala and left medial prefrontal cortex. The
 6 authors suggest that the effects on these brain areas may be the way that deqi influences
 7 the brain and symptoms of functional dyspepsia.

8 9 **Pregnancy-related Pelvic Pain**

10 Liddle and Pennick (2015) updated the evidence assessing the effects of any intervention
 11 used to prevent and treat low back, pelvic pain, or both during pregnancy. Thirty-four RCTs
 12 examined 5,121 pregnant women, aged 16 to 45 years and, when reported, from 12 to 38
 13 weeks' gestation. Fifteen RCTs examined women with low-back pain (participants =
 14 1,847); six examined pelvic pain (participants = 889); and 13 examined women with both
 15 low-back and pelvic pain (participants = 2,385). All interventions were added to usual
 16 prenatal care and, unless noted, were compared with usual prenatal care. For pelvic pain,
 17 results from a meta-analysis provided low-quality evidence of no significant difference in
 18 the number of women reporting pelvic pain between group exercise, added to information
 19 about managing pain, and usual prenatal care. For low-back and pelvic pain, results from
 20 meta-analyses provided moderate-quality evidence that: an eight- to 12-week exercise
 21 program reduced the number of women who reported low-back and pelvic pain; land-based
 22 exercise, in a variety of formats, significantly reduced low-back and pelvic pain-related
 23 sick leave. The results from a number of individual studies, incorporating various other
 24 interventions, could not be pooled due to clinical heterogeneity. There was moderate-
 25 quality evidence from individual studies suggesting acupuncture or craniosacral therapy
 26 improved pelvic pain more than usual prenatal care. Evidence from individual studies was
 27 largely of low quality, and suggested that pain and functional disability, but not sick leave,
 28 were significantly reduced following a multi-modal intervention (manual therapy, exercise,
 29 and education) for low-back and pelvic pain. When reported, adverse effects were minor
 30 and transient. Authors concluded there is low-quality evidence that exercise (any exercise
 31 on land or in water) may reduce pregnancy-related low-back pain and moderate- to low-
 32 quality evidence suggesting that any exercise improves functional disability and reduces
 33 sick leave more than usual prenatal care.

34
 35 Vas et al. (2019) conducted a randomized trial of auricular acupuncture or non-specific ear
 36 needling or placebo acupuncture vs. only standard obstetrical care for 220 pregnant patients
 37 with pregnancy-related lower back pain and/or posterior pelvic girdle pain. Two sessions
 38 were given over 2 weeks. The primary outcome was pain intensity from 0-100 and the true
 39 acupuncture effect on this pain level was significantly greater than the other groups. The
 40 Roland-Morris Disability Questionnaire and SF-12 scores showed significantly more
 41 improvement in the true acupuncture group.

1 **Chronic Prostatitis/Chronic Pelvic Pain (CP/CPPS)**

2 Franco et al. (2018) assessed the effects of non-pharmacological therapies for CP/CPPS.
 3 Thirty-eight studies with 3,290 men with CP/CPPS. Based on short-term follow-up,
 4 acupuncture typically led to clinically meaningful reductions in prostatitis symptoms when
 5 compared with sham. It also resulted in little to no difference in adverse events.
 6 Acupuncture did not consistently reduce sexual dysfunction when compared to sham.
 7 There was no information available for quality of life, depression, or anxiety. Qin et al.
 8 (2016) assessed the comparative efficacy and safety of acupuncture, alpha-blockers, and
 9 antibiotics for CP/CPPS. Twelve trials involving 1,203 participants were included. Based
 10 on decreases in the National Institutes of Health Chronic Prostatitis Symptom Index (NIH-
 11 CPSI) score, a network meta-analysis indicated that electro-acupuncture, acupuncture,
 12 alpha-blockers, antibiotics, and dual therapy were superior to placebo in decreasing this
 13 score. Additionally, electro-acupuncture and dual therapy were more effective than alpha-
 14 blockers in decreasing the NIH-CPSI total score. Other network meta-analyses did not
 15 show significant differences between interventions and placebo. The incidence of adverse
 16 events of acupuncture was relatively rare (5.4%) compared with placebo (17.1%), alpha-
 17 blockers (24.9%), antibiotics (31%) and dual therapy (48.6%). Overall, rank tests and
 18 safety analyses indicated that electro-acupuncture/acupuncture may be recommended for
 19 the treatment of CP/CPPS.

20
 21 A review of randomized, controlled trials by Li et al. (2020) included 11 studies and 748
 22 patients. Acupuncture was found to lower overall National Institutes of Health-Chronic
 23 Prostatitis Symptom Index (NIH-CPSI) scores better than sham acupuncture or medication.
 24 There was no difference between true acupuncture and medication on the voiding subscore
 25 of the NIH-CPSI. There was no significant difference between acupuncture and sham
 26 acupuncture on the International Prostate Symptom Scores (IPSS). Acupuncture and
 27 medication together improved NIH-CPSI total score and pain domain subscores compared
 28 to medication alone. The authors reported significant heterogeneity and bias risk in the
 29 studies disallowing definitive conclusions.

30
 31 Zhang et al. (2021) completed a meta-analysis evaluating acupuncture for chronic
 32 prostatitis pain including the typical points and number of treatments used. True
 33 acupuncture when compared with sham acupuncture was the most effective in improving
 34 pain, urinary symptoms, and quality of life scores in the NIH-CPSI. Acupuncture was also
 35 better at pain relief without associated adverse effects when compared with medications.
 36 Combining acupuncture and medication produced a better reduction in the NIH-CPSI than
 37 either treatment modality alone. The number of acupuncture sessions in the reviewed
 38 studies ranged from 6 to 28. The more acupuncture treatments, the better the NIH-CPSI
 39 score. The authors concluded that 4 acupuncture treatments were the minimum
 40 recommended for basic efficacy especially if symptoms were more acute. Higher numbers
 41 of treatments resulted in improvement in urinary symptoms and quality of life. In Chinese
 42 Medicine theory, acupuncture points are chosen based on the individual's evaluation. The

1 trials mostly based their point selection on combinations of three points from CV3, CV4,
2 BL32, SP 6 and SP 9.

3
4 In a meta-analysis, Kang et al. (2021) compared efficacy and safety of acupuncture vs.
5 extracorporeal shockwave therapy (ESWT) for chronic prostatitis/chronic pelvic pain.
6 Nine RCTs with 525 patients were reviewed. Outcomes included the NIH-CPSI total and
7 sub scores for pain and urinary symptoms, IPSS score, and IIEF (International Index of
8 Erectile Function). ESWT and acupuncture were each more effective than sham
9 procedures. ESWT was more effective than acupuncture in the short term of less than 4
10 weeks and mid-term of 8-12 weeks. ESWT and acupuncture had similar efficacy long-term
11 after 24 weeks.

12
13 A randomized controlled study by Sun et al. (2021) included 440 men with moderate to
14 severe chronic prostatitis evenly divided into an acupuncture treatment group and a sham
15 acupuncture group. The course of treatment or sham included 20 visits over 8 weeks. The
16 true acupuncture participants consistently achieved clinically significant reductions in
17 scores on the National Institutes of Health Chronic Prostatitis Symptom Index at 8 and 32
18 weeks over the sham group. No serious adverse events were reported.

19
20 In a systematic review and meta-analysis of 10 RCTs involving 798 patients , Pan et al.
21 (2023) demonstrated that acupuncture was superior in relieving chronic prostatitis/chronic
22 pelvic pain syndrome pain when compared with sham acupuncture and Western medical
23 care. The authors specifically excluded poor quality studies that were included in prior
24 meta-analyses, such as studies that were not randomized, had no data for extraction, or
25 were otherwise of low quality and required the JADAD score to be equal to or greater than
26 4. Outcome measures included NIH-CPSI score, quality of life, urinary symptoms, and
27 efficacy rate. Four trials listed mild hematomas and pain in the acupuncture and sham
28 acupuncture groups. The Western Medicine treatment group reported nausea, abdominal
29 pain, dizziness, and hypotension.

30
31 Wang et al. (2023) performed a systematic review on acupuncture and chronic
32 prostatitis/chronic pelvic pain syndrome including 11 studies with 570 participants. The
33 most common areas of acupuncture points were the low back and lower extremities; most
34 common meridians were urinary bladder, ren, and spleen. SP 6 was the most commonly
35 used point followed by UB33, 35, and 23. Acupuncture frequency varied from 1-3 times a
36 week. Length of treatment course was 6 weeks in most studies with a range of 2-10 weeks.
37 Each acupuncture session lasted from 10-30 minutes. All the studies reviewed showed
38 some degree of improvement in pain sub-scores on the NIH-CPSI scale.

39
40 Zhang et al. (2023) compared various combinations of acupuncture techniques (e.g.,
41 acupuncture needling, moxibustion, catgut embedding, auricular) with alpha-receptor
42 blocking medications for treating chronic prostatitis/chronic pelvic pain. Nineteen studies

1 with 1,739 participants were included. For the total effectiveness rating, the combination
 2 of alpha-receptor blockers and acupuncture needling was superior to other combinations.
 3 For the NIH-CPSI total score, the alpha-receptor blocker, moxibustion and auricular
 4 acupuncture was optimal with medication and needling coming in second. For the pain
 5 subgroup on the scale, medications and moxibustion was the best combination. There was
 6 no statistically significant difference between the treatment combinations for the voiding
 7 and quality of life sub-scores.

9 **Endometriosis-related Pain**

10 Xu et al. (2017) studied the effects of acupuncture for the treatment of endometriosis-
 11 related pain in a systematic review and meta-analysis. Authors noted that the pain
 12 alleviating effects of acupuncture have been attributed to various physiological and
 13 psychological processes, such as activation of endogenous descending pain inhibitory
 14 systems, deactivation of brain areas that transmit pain-related signals, interaction between
 15 nociceptive impulses and somato-visceral reflexes, and the expectation of symptom relief.
 16 Another finding noted in the manuscript reported that women with more advanced degrees
 17 of endometriosis showed higher CA-125 levels in both serum and peritoneal fluid. and
 18 many studies have reported that acupuncture can reduce the level of serum CA-125,
 19 relieving the pelvic cavity pain that is associated with endometriosis. Thus, acupuncture
 20 may serve as a complement or alternative to other treatments. For purposes of this
 21 systematic review, patients were classified in one of four groups: (1) cured – the symptoms
 22 of dysmenorrhea, abdominal discomfort, abdominal pain, periodic rectal irritation, etc., as
 23 well as the pelvic mass, had disappeared; (2) markedly effective – abdominal pain was
 24 obviously relieved, other symptoms had improved, and the pelvic mass had narrowed by
 25 more than 50%; (3) effective – abdominal pain was relieved, other symptoms had
 26 improved, the pelvic mass had narrowed more than 33%, and dysmenorrhea had not
 27 increased in severity three menstrual cycles after treatment; (4) failed – abdominal pain
 28 and other symptoms had not changed. In the current study, they systematically reviewed
 29 the results of 10 RCTs comparing the outcomes of acupuncture with those of other
 30 therapies (sham acupuncture, Western medicine, or Traditional Chinese Medicine) in the
 31 treatment of endometriosis-related pain. Among the 10 RCTs included, 6 reported
 32 variations in main pain level, 4 reported variations in peripheral blood CA-125 levels, and
 33 7 reported the clinical effective rate of acupuncture as a treatment for endometriosis-related
 34 pain. In all 10 of the studies, the interventions were acupuncture, and the control
 35 interventions were placebo, Western medicine, or Traditional Chinese Medicine. Because
 36 so few studies were included, they did not carry out a subgroup analysis. Authors
 37 concluded that acupuncture consistently yields better reductions in pain and serum CA-125
 38 levels than do control treatments, regardless of the control intervention used. Given the
 39 findings, authors concluded that the effect of acupuncture in the treatment of
 40 endometriosis-related pain is likely mediated by endocrine and cytokine changes, as well
 41 as by anti-inflammatory and analgesic effects. As a result, the therapy could be applied as
 42 a complementary treatment for endometriosis-related pain. However, to confirm these

1 findings, additional studies with proper controls, blinding methods, and adequate sample
2 sizes are needed.

3
4 Giese et al. (2023) included 6 studies (331 participants) in their systematic review and
5 meta-analysis of acupuncture for endometriosis pain. Acupuncture was compared with
6 non-specific acupuncture or usual care (contraceptives/analgesics). They determined there
7 was low certainty evidence for acupuncture over non-specific acupuncture for benefit in
8 pelvic pain overall and non-specific pelvic pain; Moderate evidence for dysmenorrhea.
9 Compared with usual care, there was very low certainty evidence for relief of
10 dysmenorrhea.

11 **Bladder Pain Syndrome/Interstitial Cystitis (BPS/IC)**

12 Verghese et al. (2016) assessed the effectiveness of various complementary therapies
13 available for treatment of BPS. A total of 1,454 citations were identified. The key
14 interventions studied were acupuncture, relaxation therapy, physical therapy, hydrogen-
15 rich therapy, diet, and nitric oxide synthetase. Authors concluded that therapies with the
16 potential for benefit in patients with bladder pain syndrome are dietary management,
17 acupuncture, and physical therapy. These findings were obtained from small studies and
18 hence caution is advised. More studies of higher quality are needed to confirm findings.
19 Sönmez et al. (2017) aimed to determine the effectiveness of acupuncture treatment in
20 patients with refractory IC/BPS. Twelve refractory IC/BPS female patients received 10
21 sessions of acupuncture at a frequency of twice a week. The visual analog score (VAS),
22 interstitial cystitis symptom index (ICSI), interstitial cystitis problem index (ICPI),
23 O'Leary-Saint symptom score (OSS), Patient Health Questionnaire (PHQ9), Pelvic pain
24 and urgency & frequency patient symptom scale tests (PUF) and maximum voided volume
25 (MVV) were completed in 1st, 3rd, 6th, and 12th months following the treatment. Results
26 demonstrated that there were statistically significant decreases in all the scores evaluated
27 at first month compared with the baseline. While the change in VAS score in months 1, 3,
28 6, and 12 were found statistically significant, measurements of ICSI, OSS and PUF scores
29 and MVV values in months 6 and 12 and ICPI and PHQ scores in month 12 were not found
30 statistically significant compared to the pre-treatment period. Response to treatment for the
31 first 3 months following acupuncture application was 100%, but this ratio was measured
32 as 33.3% (4/12) in the sixth month and 16.6% (2/12) in the 12th month. Authors suggested
33 that acupuncture appeared to be an effective, useful, non-invasive method in patients with
34 IC/BPS. It can be used as an appropriate treatment method not only in refractory cases, but
35 also in non-chronic IC cases since it appeared to be better compared to other treating agents.
36

37 **Dysmenorrhea**

38 Woo et al. (2018) aimed to evaluate the current evidence regarding the efficacy and safety
39 of acupuncture on primary dysmenorrhea in a systematic review. This review included 60
40 randomized controlled trials; however, the meta-analysis only included 49 RCTs. Most
41 studies showed a low or unclear risk of bias. Authors found that compared to no treatment,
42

1 manual acupuncture and electro-acupuncture were more effective at reducing menstrual
 2 pain, and compared to nonsteroidal anti-inflammatory drugs (NSAIDs), manual
 3 acupuncture and warm acupuncture were more effective at reducing menstrual pain.
 4 Authors concluded that the results of this study suggest that acupuncture might reduce
 5 menstrual pain and associated symptoms more effectively compared to no treatment or
 6 NSAIDs, and the efficacy could be maintained during a short-term follow-up period. Woo
 7 et al. (2018) suggested that despite limitations due to the low quality and methodological
 8 restrictions of the included studies, acupuncture might be used as an effective and safe
 9 treatment for females with primary dysmenorrhea.

10
 11 Yan et al. (2020) reviewed 28 systematic reviews and meta-analyses, and 281 original
 12 studies on 26,459 patients. Moderate quality evidence suggested that acupuncture and
 13 moxibustion were more effective than indomethacin or fenbid for treating pain in primary
 14 dysmenorrhea. Low quality evidence suggested that acupuncture and moxibustion can
 15 effectively treat dysmenorrhea with fewer adverse events than medication.

16 In a systematic review, Wang et al. (2023) evaluated 15 trials with 1,018 participants.
 17 Acupuncture, compared to sham acupuncture, reduced the VAS pain scores for
 18 dysmenorrhea more effectively with moderate certainty evidence. Pelvic pain scores were
 19 reduced more than controls with high certainty evidence. Acupuncture combined with
 20 conventional therapy improved quality of life more than conventional therapies alone. Six
 21 studies reported on safety and documented that adverse events were less frequent in
 22 participants who received acupuncture.

23 24 **Chronic Pelvic Pain (CPP)**

25 Sung et al. (2018) aimed to evaluate the current evidence from randomized controlled trials
 26 (RCTs) related to the effectiveness and safety of acupuncture treatment (AT), including
 27 electroacupuncture or thread-embedding therapy in combination with modern technology,
 28 for chronic pelvic pain (CPP) in women via a systematic review and meta-analysis. Four
 29 RCTs with 474 participants were included. The methodological quality of included studies
 30 was generally low. The results of meta-analysis of two studies showed that AT combined
 31 with conventional treatment (CT) was associated with significantly reduced CPP, based on
 32 the total effectiveness review suggested the potential of AT combined with CT compared
 33 to CT alone for treating female CPP. However, there was insufficient evidence to conclude
 34 that AT can be recommended as a complementary and alternative (CAM) treatment for
 35 women with CPP. Larger, more rigorously designed RCTs are needed to confirm results.

36
 37 Lin et al. (2023) utilized 17 randomized, controlled trials with 1,455 participants for meta-
 38 analysis. Acupuncture, electroacupuncture, moxibustion, laser, catgut implantation,
 39 auricular acupuncture, and acupressure were included. The control intervention group
 40 included health education, western medication, physiotherapy, sham acupuncture, and
 41 herbal medicine. The visual analog scale and total pain scores from the NIH-chronic
 42 prostatitis symptom index were used for outcome evaluation. Conditions treated included

1 endometriosis, chronic prostatitis, pregnancy-related pelvic and low back pain, and
 2 dysmenorrhea. The authors concluded that the acupuncture interventions were more
 3 beneficial for pain management than sham acupuncture, western medications or herbal
 4 medicines when used alone or with these other therapies.

6 PRACTITIONER SCOPE AND TRAINING

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

12
 13 It is best practice for the practitioner to appropriately render services to a patient only if
 14 they are trained, equally skilled, and adequately competent to deliver a service compared
 15 to others trained to perform the same procedure. If the service would be most competently
 16 delivered by another health care practitioner who has more skill and training, it would be
 17 best practice to refer the patient to the more expert practitioner.

18
 19 Depending on the practitioner’s scope of practice, training, and experience, a patient’s
 20 condition and/or symptoms during examination or the course of treatment may indicate the
 21 need for referral to another practitioner or even emergency care. In such cases it is essential
 22 for the practitioner to refer the patient for appropriate co-management (e.g., to their primary
 23 care physician) or if immediate emergency care is warranted, to contact 911 as appropriate.
 24 See the Managing Medical Emergencies (CPG 159 – S) clinical practice guideline for
 25 information.

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 28 Diseases Tenth Revision, (ICD-10)

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