

1 **Clinical Practice Guideline:** **Magnet Therapy – Static**

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

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5 **Product:** **Specialty**

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8 **GUIDELINES**

9 American Specialty Health – Specialty (ASH) considers static magnet therapy unproven
10 because scientific evidence does not support its use for pain relief. Magnet therapy also
11 poses a health and safety risk through substitution harm and may not be safe for some
12 people, such as those who use pacemakers or insulin pumps, as magnets may interfere with
13 these devices.

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15 For more information, see the *ASH Techniques and Procedures Not Widely Supported as*
16 *Evidence Based (CPG 133 – S)* clinical practice guideline.

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

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33 **DESCRIPTION/BACKGROUND**

34 Magnet therapy, also known as magnetotherapy, refers to the use of static magnets placed
35 directly on the body, usually over regions of pain. The vast majority of magnets marketed
36 to consumers to treat pain are static magnets whose resulting magnetic fields are
37 permanent, unchanging.

38

39 The other magnets used for health purposes are called electromagnets, because they
40 generate magnetic fields only when electrical current flows through them. These
41 fluctuating magnetic fields use an electrical charge produced by units similar to those used

1 in hospitals to reduce fracture healing time. Static magnets do not use an electrical energy
2 supply to fluctuate their magnetic fields.

3
4 Proponents of static magnet therapy purport that magnetic fields emanating from fixed
5 magnets placed close to the body can cause bones to heal faster, and pain to be relieved, as
6 well as other forms of healing. It is most commonly recommended by practitioners as a
7 cure for joint disorders and painful back conditions.

8
9 Static magnets are either attached to the body by tape or placed in specially designed
10 products such as belts, wraps, or mattress pads. Magnets are typically kept in place over
11 the area of pain for varying lengths of time, usually from 1-3 hours a day, but may be
12 maintained continuously. Magnets may be recommended to remain in place until two (2)
13 days after the pain has been relieved.

14
15 The U.S. Food and Drug Administration (FDA) has not approved the marketing of magnets
16 with claims of benefits to health (such as "relieves arthritis pain"). The FDA and the Federal
17 Trade Commission (FTC) have taken action against many manufacturers, distributors, and
18 Web sites that make claims not supported scientifically about the health benefits of
19 magnets.

20 21 **EVIDENCE REVIEW**

22 Clinical trials of static magnet therapy have produced conflicting results. Many concerns
23 exist regarding the quality and rigor of the studies conducted to date, leading to a call for
24 additional, higher quality, and larger studies. Thus far, scientific research does not firmly
25 support a conclusion that use of static magnets is effective in the management of
26 neuromusculoskeletal pain.

27
28 In a double-blind placebo-controlled randomized clinical trial, the use of a magnet for
29 reducing pain attributed to carpal tunnel syndrome was no more effective than use of the
30 placebo device (Carter et al., 2002).

31
32 A study of the use of magnet therapy for low back pain conducted at an ambulatory care
33 physical medicine and rehabilitation clinic at a Veterans Affairs hospital showed no
34 statistically significant difference in the effect between real and sham magnets (Collacott
35 et al., 2000).

36
37 A systematic review of trials regarding the effectiveness and duration of benefit from non-
38 surgical treatments, apart from local steroid injection, for carpal tunnel syndrome revealed
39 that non-surgical treatments, including magnet therapy, do not produce significant benefit
40 (O'Connor et al., 2002). More trials are needed to compare treatments and ascertain the
41 duration of benefit.

1 One review found that static magnetic therapy may work for certain conditions but that
 2 there is not adequate scientific support to justify its use (Ratterman et al., 2002). Another
 3 review looked at two randomized controlled trials (RCTs) of static magnets (Vallbona et
 4 al., 1999). One reported significant pain relief in subjects using magnets, but the other did
 5 not. The remaining review found no studies on magnets for neck pain and stated that
 6 rigorous studies are much needed (Swenson, 2003). It is important to note that the reviews
 7 pointed out problems with the rigor of most research on magnets for pain (Vallbona et al.,
 8 1999). Thus, the results of many trials may not be truly meaningful. Most reviews stated
 9 that more and better quality research is needed before the effectiveness of magnets can be
 10 adequately judged.

11
 12 The results of trials of static magnets have been conflicting. Four (4) of the nine (9) static
 13 magnet trials analyzed found no significant difference in pain relief from using a magnet
 14 as compared with sham treatment or usual medical care (Winemiller et al., 2003; Collacott
 15 et al., 2000; Carter et al., 2002; Caselli et al., 1997). Four (4) trials did find a significant
 16 difference, with greater benefit seen from magnets (Weintraub et al., 2003; Hinman et al.,
 17 2002; Alfano et al., 2001; Wolsko et al., 2004). The remaining trial compared only a weaker
 18 magnet to a stronger magnet and found benefit from both for management of rheumatoid
 19 arthritis (there was no difference between groups in degree of benefit) (Segal et al., 2001).
 20 Macfarlane et al. (2012) and Richmond et al. (2013) concluded that magnet therapy was
 21 not effective in the management of rheumatoid arthritis. Richmond et al. (2009) also
 22 determined that magnet therapy was not effective in the management of osteoarthritis. In a
 23 Cochrane Review, Kroeling et al. (2013) determined that permanent magnets (necklace)
 24 were no more effective than placebo for neck pain.

25
 26 Fan, et al. (2021) analyzed 28 studies of static magnetic fields and their analgesic effects.
 27 64% of human studies showed analgesic effects from the magnets. Effects were related to
 28 the intensity of the magnetic field, treatment times and pain types. Higher magnetic
 29 intensities and longer treatment times may provide more effective pain relief. The authors
 30 recommended further study to evaluate static magnetic field parameters, their associated
 31 molecular mechanisms and pain relief effects on various types of pain conditions.

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