

1 **Clinical Practice Guideline: Upper Cervical Adjusting Techniques**

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3 **Date of Implementation: July 13, 2006**

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5 **Product: Specialty**

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8 **GUIDELINES**

9 American Specialty Health – Specialty (ASH) considers upper cervical adjusting  
10 techniques as unproven when a practitioner uses this technique for the purpose of treating  
11 complaints unrelated to the cervical spine and/or when a practitioner relies solely on non-  
12 evidence based methods (e.g., x-rays to identify subluxations and/or line of correction,  
13 thermography) to confirm the subluxation’s removal or assess outcomes because there is  
14 insufficient evidence in the literature to establish safety and clinical effectiveness.

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

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19 ASH considers adjusting upper cervical vertebrae to treat chief complaints unrelated to the  
20 cervical spine (e.g., lumbar pain) as unproven because there is insufficient evidence in the  
21 literature to establish clinical effectiveness.

22

23 ASH considers the use of a high-velocity, low-amplitude (HVLA) thrust adjusting  
24 technique by itself, when practiced as part of an upper cervical protocol, as medically  
25 necessary when the use of that technique:

- 26 • Does not require x-rays to identify subluxation/misalignment, to determine line of
- 27 adjustment/correction, or to confirm effectiveness of the adjustment;
- 28 • Is not for the purpose of treating complaints unrelated to the cervical spine; and
- 29 • Does not rely on non-evidence-based methods to confirm the subluxation’s
- 30 removal or assess outcomes.

31

32 **DESCRIPTION/BACKGROUND**

33 Examples of upper cervical adjusting techniques included within this review are Atlas  
34 Orthogonal, Blair Upper Cervical, Grostic, National Upper Cervical Chiropractic  
35 Association (NUCCA), Orthospinology, and Palmer Upper Cervical/Hole in One (HIO)  
36 techniques. The primary focus of upper cervical practitioners is the correction of the atlas  
37 or axis subluxation. According to the National Awareness Campaign for Upper Cervical  
38 Care (NACUCC), upper cervical adjustments correct the position of the top vertebrae of  
39 the spine, the atlas, and/or axis. Proponents theorize that correcting the tilt, shift, or rotation  
40 of these vertebrae enables the body to more effectively overcome or completely eliminate  
41 many different conditions.

1 Upper cervical practitioners believe two consequences can result if upper cervical  
2 vertebrae are malpositioned. The first is body imbalance — upper cervical practitioners  
3 posit that when the atlas and/or axis are out of alignment, the head moves off center of the  
4 body, creating an imbalance from head to toe. The second adverse effect is restriction or  
5 distortion of brain messages to different parts of the body.

6  
7 Upper cervical technique proponents believe that by correcting the atlas/axis, all other  
8 spinal subluxation will self-correct. Many of these techniques involve a supine leg length  
9 check, x-ray analysis, and/or thermography to verify their atlas/axis correction. However,  
10 the method for determining the correct vector or line of adjustment relies heavily on x-ray  
11 analysis. This includes both initial baseline views and, in many cases, follow-up or post  
12 treatment views to evaluate progress. The most common x-rays taken by upper cervical  
13 practitioners include Lateral Cervical, Nasium, Base Posterior or Vertex, and Anterior-  
14 Posterior Cervical Open Mouth (APOM).

## 15 16 **EVIDENCE REVIEW**

17 Each of the upper cervical techniques listed above has a technique manual and other  
18 published materials describing the technique and its theoretical rationale. Rochester (2009)  
19 described a retrospective case series of neck pain and disability outcomes following a  
20 chiropractic upper cervical low force technique (UCLF). The author suggested that based  
21 on the retrospective review, UCLF chiropractic instrument adjustments utilizing a  
22 vertebral alignment model are promising for the management of cervical pain. Eriksen et  
23 al. (2011) studied adverse events following spinal adjustments using upper cervical  
24 techniques, and the impact of this care on clinical outcomes. A total of 1,090 patients  
25 completed the study having 4,920 (4.5 per patient) office visits requiring 2,653 (2.4 per  
26 patient) upper cervical adjustments over 17 days. Thirty-one percent (31%) of patients had  
27 symptomatic reactions that met the accepted definition. Intense symptomatic reactions  
28 occurred in 5.1% of that population. Outcome assessments were significantly improved for  
29 neck pain and disability, headache, mid-back pain, as well as lower back pain and disability  
30 ( $p < 0.001$ ) following care with a high level (mean = 9.1/10) of patient satisfaction. The 83  
31 chiropractors administered >5 million career upper cervical adjustments without a reported  
32 incidence of serious adverse event. Authors concluded that upper cervical chiropractic  
33 care may have a fairly common occurrence of mild intensity symptomatic reactions that  
34 are short in duration. They also stated that outcome assessments were significantly  
35 improved with high patient satisfaction with less than 3 weeks of care. Authors stated that  
36 although findings need to be confirmed the preliminary data show benefit over potential  
37 risks regarding upper cervical chiropractic care. Woodfield et al. (2015) presented a  
38 narrative review of upper cervical procedures intended to facilitate understanding and  
39 increase knowledge. Authors report that these techniques share the same theoretical basis  
40 and assessment as other cervical techniques, but the major difference involves their use of  
41 either an articular or orthogonal radiograph analysis model when determining the presence  
42 of a misalignment. Adverse events following an upper cervical adjustment consist of mild

1 symptomatic reactions of short-duration (< 24-hours). However, due to a lack of quality  
 2 and indexed references, information reported is limited by the significance of literature  
 3 cited, which included only non-indexed and/or non-peer reviewed sources.

4  
 5 Based on the review conducted, ASH is unable to draw conclusions due to the paucity of  
 6 high-quality published studies on the effectiveness of these techniques.

## 7 8 **PRACTITIONER SCOPE AND TRAINING**

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

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

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

26  
 27 Depending on the practitioner's scope of practice, training, and experience, a member's  
 28 condition and/or symptoms during examination or the course of treatment may indicate the  
 29 need for referral to another practitioner or even emergency care. In such cases it is prudent  
 30 for the practitioner to refer the member for appropriate co-management (e.g., to their  
 31 primary care physician) or if immediate emergency care is warranted, to contact 911 as  
 32 appropriate. See the *Managing Medical Emergencies (CPG 159 – S)* clinical practice  
 33 guideline for information.

## 34 35 **References**

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