

The Upper Thoracic Hump Pattern

(and fixing it with Koren Specific Technique)

BY TEDD KOREN, D.C.

“Patients are concerned about their humps and are very motivated to get them fixed. They should be.”

“Doctor, I’ve been worried about my hump. Will it get worse? Can you fix it?”

Unlike the better-known dowager’s hump, the upper thoracic hump (see photos and illustrations) is more common and is found in younger as well as older people.

Patients are concerned about their humps and are very motivated to get them fixed. They should be. Along with its unattractiveness, the hump affects the heart, lungs and thyroid.

Increased thoracic curve (hyperkyphosis) has even been linked to increased mortality. One research paper finds, “The hyperkyphotic posture was specifically associated with an increased rate of death due to heart disease.”¹

The hump can also cause or contribute to hand, arm, shoulder, neck, lower back, sacrum and sciatica pain. Patients fear it is a harbinger to little-ol’-man/ woman status, i.e. the dowager’s hump.

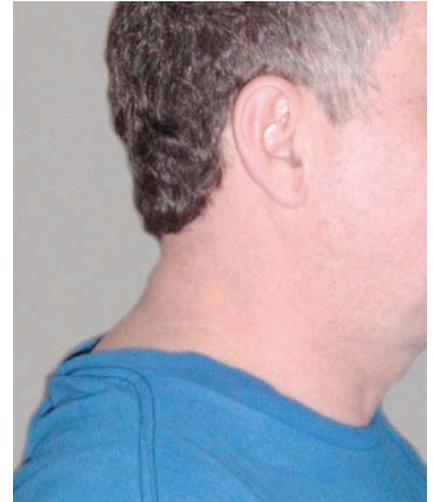
The classical dowager’s hump or dorsal kyphosis (forward curve in the mid and upper thoracic spine) is associated with old age and may involve wedged or triangular shaped vertebral bodies, compression fractures and osteoporosis. Undoubtedly, it is the end-stage of a chronic subluxation pattern and is probably related to the upper thoracic hump.

Subluxation patterns

Pattern: A consistent, characteristic form, style, or method, as:

- a. A composite of traits or features characteristic of an individual or a group: *one’s pattern of behavior.*²

In medicine, a “syndrome” denotes a group of symptoms that characterize a disease condition. Chiropractic, being a



These pictures show a woman and a man each with an upper thoracic hump. Notice the anteriority of the head (look at the ear relative to the shoulders). The woman’s hump is more pronounced. Some humps are barely noticeable; only proper analysis will determine if the upper thoracics and other structures of the hump pattern are subluxated.

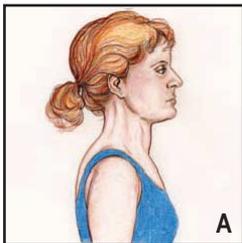
vitalistic healing profession rather than disease and symptom oriented, refers to a group of subluxations as a pattern.

There are a few common patterns we can quickly locate (analyze) and correct (yes, correct) with Koren Specific Technique (KST). In addition to the hump pattern, there are the panic pattern, various cranial patterns, the femur head pattern and the upper cervical pattern.

What is the hump pattern?

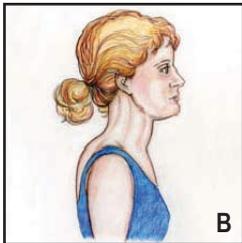
A bump is usually easily palpated at the top of the thoracic spine or at the thoracic/cervical area. The head is often anterior to the shoulders, exposing the upper thoracic area. The body deposits fat over the exposed area, which has been referred to as the “hump pad.”³

The hump pattern causes loss of height and diminished lung capacity. Diminished lung capacity may not be noticed until the pattern is corrected and you tell the patient to inhale.



(“I didn’t realize it, but now I can take a deep breath.”).

In illustration “A” on the far left, the woman’s head sits evenly over her shoulders; this is “normal” posture. In illustration “B”, her head is anterior to her shoulders and, over time, the hump may develop fatty tissue to protect the “exposed” area.



Because of her anterior head carriage the trapezius muscles are often tight and there is greater stress on the mid-thoracic spine and her lower back and sacrum.

When the hump is corrected...

When the hump pattern is corrected or adjusted, patients often experience immediate improvement in posture, balance, breathing and loss of inflammation along the anterior ribs. A greater overall sense of relaxation and well-being is often noticed as deep subluxation stress releases.

The goal of chiropractic care is not to correct the hump per se, but to correct the subluxations associated with the hump (the hump pattern). Once the subluxations are corrected and the segments are no longer fixated, the body is better able to restore a healthy posture.

For many, the hump may not appear much different at first; however, for some people, the hump may dramatically reduce within a few days and may disappear within weeks. Others, depending upon age and lifestyle, may take longer. But, as long as the hump remains unsubluxated, it will be healing.

Fixing the hump pattern

The key to a proper correction is specificity: knowing exactly what is out of alignment and the direction of the misalignment (listing). This permits you to use a minimal amount of force/energy/information to correct the subluxation. Corrections will also be more long lasting.

Note: With KST hump pattern adjusting, the patient is standing or sitting.

What needs to be adjusted?

This is the typical hump pattern:

- 1. Upper thoracic:** T-1, T-2 spinous processes superior, T-3 spinous process inferior.
- 2. Ribs:** 1st, 2nd and 3rd anterior ribs are usually inferior on the right and superior on left. This is important. The reason the hump persists, even after vertebrae adjustments, is because the ribs are locked. There may be inflammation and sensitivity over the anterior ribs when they are challenged.
- 3. Other thoracics:** A mid thoracic vertebrae (usually T-7 to T-9 inferior) is involved. It may be rotated left or right. The ribs are usually inferior on one side and superior on the other side.

Note: Hump pattern patients often have lumbar and/or sacral problems/subluxations. This may be compensation for the anterior head carriage.



Lincoln College Endowed Chair of Chiropractic Biomechanical Research*

The University of South Florida (USF) is seeking an innovative senior biomechanical researcher who is looking for new challenges in conducting applied research in biomechanics and motion analysis integrating the role of chiropractic care in human performance.

The successful candidate will hold the Lincoln College Endowed Chair in order to launch a core research program for USF's major initiative in athletic safety. The initiative will boost the health of children and adults, amateur as well as professional sportsmen. The goal is to build an inter-professional program that links sports medicine, chiropractic, and physical therapy with orthopedics and neurosurgery. It is part of USF Health's commitment to the broad continuum of health for individuals.

The candidate will be part of USF's excitement about joining the “Big East” Division I sports conference and its creation of a multidisciplinary Sports Medicine Clinical and Research Integrated Strategic Program (CRISP). The uniqueness of this position for the candidate is further reinforced by the Tampa Bay community - an environment with a high quality of life, boundless recreational activities, great winter weather, opportunities for children, and a business community rapidly investing in the technologic and entrepreneurial future of the region and the state. In addition, as stated recently by a national authority in sports medicine: “The Tampa Bay area has an underserved and growing population of youth and high school athletes, as well as large numbers of college, professional and aging athletes. The leadership here recognizes a tremendous opportunity to reach out to the community through sports medicine.”

- The statewide sports medicine program is the latest initiative developing an interdisciplinary clinical, research and educational institute for sports medicine and athletic related trauma.
- The Endowed Chair of Chiropractic Biomechanical Research will report to the CEO, Sports Medicine CRISP and is responsible for programmatic development leading the research enterprise to prominence.
- The Endowed Chair will be responsible for management of laboratory business and fostering excellence in education, training and research.
- Resource investment will be commensurate with the vision proposed by the selected candidate.

USF is a public research university with a growing national reputation, serving over 40,000 students in ten colleges on campuses in Tampa, Lakeland, St. Petersburg and Sarasota. USF is one of three public universities in Florida classified as Research I institutions primarily through achievements of USF Health. In addition to the entering class of 120 medical students, 36 physical therapy and about 20 PhD candidates each year. USF offers baccalaureate degrees in 79 fields, 89 master's and specialist programs and 25 doctoral programs.

USF Health consists of the Colleges of Medicine, Nursing, Public Health and the School of Physical Therapy. The College of Medicine has 495 faculty (400 clinical faculty comprise the region's largest medical group practice), 45 ACGME accredited residency programs, and is affiliated with seven teaching hospitals. USF Health funded research currently totals over 145 Million annually.

This position is expected to have an academic and professional focus on conducting applied research in biomechanics, and motion analysis integrating the role of chiropractic care in human performance. The successful candidate will hold a doctoral degree in Chiropractic and a PhD; have a distinguished record in research and research administration, a record of significant ongoing extramural support, an established record of scholarly publication, along with prior experience in a multi-disciplinary setting. Prefer candidates with strong career achievements in funded research, national prominence, and administrative leadership skills. A minimum of five years experience as an Associate or Full Professor, or equivalent professional experience, and a national reputation in their area of scholarly competence is required to be considered for appointment at the rank of Full Professor. The position is open until filled and application review begins March 1, 2006.

Interested individuals should submit a letter describing accomplishments and career goals and a current curriculum vita to the attention of:

Dr. William (Sandy) Quillen
 University of South Florida
 12901 Bruce B. Downs Blvd., MDC77
 Tampa, Florida 33612-4799
 wquillen@hsc.usf.edu

The University of South Florida is an equal opportunity, affirmative action, equal access institution. For disability accommodations, please contact Robin Hudson at 813/974-7745 a minimum of 5 working days in advance. According to Florida law, search records, including applications and search committee meetings, are open to the public.

*Position endowed by the Lincoln College Education and Research Fund, Inc. and the Florida Chiropractic Foundation, Inc.

To learn more, circle #39 on The Action Card

Slight variations

Some hump patterns have complications (oh, no!) and, unless corrected, the hump will not release. Here they are:

- 1. T-1 and T-2 counter-rotation:** In addition to T-1 and T-2, superiority, T-1 and T-2 may be counter-rotated, meaning that T-1 is rotated left, while T-2 is rotated right or vice versa (challenge the spinous processes). In some cases, counter-rotation can cause severe nerve impingement and pain, numbness and paresthesias and weakness in the shoulders, arms, wrists, hands and fingers.
- 2. Transverse process (TP) and rib involvement:** Occasionally, you'll find T-1 and T-2 tilt. The transverse processes (TPs) may be anterior/superior on one side and posterior/inferior on the other. The rib articulations can be involved, causing brachial plexus problems. It isn't easy to adjust the TP and ribs from the inferior and posterior (unless you'd like to do some surgery), so contact the superior/anterior side.
- 3. Thoracic discs:** On occasion you'll find thoracic disc subluxations. C-7/T-1, T-1/T-2 or T-2/T-3 discs may be subluxated on the left or right side. Adjust, using the ArthroStim™.
- 4. Sternum and clavicles:** On rare occasions, a patient may have the sternum and/or clavicles out of alignment. This is often as a result of trauma.

Adjustment/correction

Finally! Let's fix that hump. Koren Specific Technique (KST) is a quick and easy method of analyzing and correcting any part of the body. It will quickly tell you if there is a hump pattern. After you determine the listings involved, we recommend you use the ArthroStim™ adjusting instrument to correct the involved segments.

The ArthroStim™ is a "toggle in a bottle." I set it at 12 taps per second. In a pinch, a hand-held adjusting instrument may work. You can also use a thumb toggle (à la DNFT) but, in my experience, nothing corrects subluxations as easily as an ArthroStim™.

- 1. Correcting the upper thoracics:** T-1 and T-2 are adjusted contacting the spinous or the lamina pedicle junction superior to inferior (S to I). T-3 is adjusted inferior to superior (I to S). If there is counter-rotation of T-1 and T-2 (i.e., one goes left, one goes right), it must be corrected and contact is usually on the spinous processes.
- 2. Correcting the ribs:** This is very important. If the ribs are not released, the hump will not release and the upper thoracics will re-subluxate. The ribs are adjusted at their anterior. Contact is just lateral to the sternocostal junction on both sides. Line of drive is usually I to S on the right and S to I on the left. Use the sleeve with the narrow fork with the ArthroStim™. The ribs usually correct very easily but, be gentle, because they may be inflamed from years of subluxations.
- 3. Correcting disc subluxations:** To locate a disc subluxation in KST, we use the negative finger (2nd or index). The procedure is as follows: Touch the area where the disc is located (between the vertebrae) and the body will tell you by the occipital drop or other biofeedback mechanism (i.e., muscle goes weak, reactive leg goes short) if the disc

Dowager's Hump

Can KST procedures help dowager's hump? Since the dowager's hump (DH) kyphosis is due to compression fractures, unlike the upper thoracic hump, it will most likely never return to normal shape. However, people with DH don't have to live in pain or get worse. When their subluxation patterns are corrected, the nervous system will function better. This will promote decreased pain and other symptoms, while promoting overall healing.

This is in contrast to the medical approach which is exercise, osteoporosis medications and a procedure called vertebroplasty or kyphoplasty, wherein a radiologist injects a cement into the porous sections of the fractured vertebra to stabilize the fracture, strengthen and raise the vertebral body to normal height.

KST adjustments offer a safer alternative.



Illustrations and photographs copyright © 2006 Tedd Koren. All rights reserved.

is subluxated. Adjustment is in the direction the negative finger is pointing; the negative finger "points" to the subluxation.

- 4. Fixing the lower thoracic(s):** Usually T-7, T-8 or T-9, etc., is adjusted I to S. Adjust L to R or R to L if there is rotation.
- 5. Fixing the thoracic transverse process/rib articulation:** Adjust the transverse process (TP) I to S on the high side and A to P on the anterior side. If there's counter-rotation, either side may be out.

Will I need to correct the hump pattern on every visit?

KST adjustments usually hold for a long time. However, everyone is different and patients with severe hump patterns should be checked, at least initially, on every visit. You'll find a re-adjustment is rarely needed.

Dr. Tedd Koren is the developer of Koren Specific Technique, a quick and easy way to locate and correct subluxations anywhere in the body. For information on KST seminars, go to www.teddkorenseminars.com or call 800-537-3001. For information on the ArthroStim™ adjusting instrument, go to www.impacinc.net. You can email Dr. Koren at tkoren@korenpublications.com.



References

- Kado DM, Karlamangla AS, Barrett-Connor E and Greendale G. Hyperkyphotic posture predicts mortality in older community-dwelling men and women: a prospective study. *Journal of the American Geriatrics Society*. 2004;52(10):1662.
- The American Heritage® Dictionary of the English Language, Fourth Edition*. Copyright © 2000 by Houghton Mifflin Company.
- Aldrete JA, Mushin AU, Zapata JC and Ghaly R. Skin to cervical epidural space distances as read from magnetic resonance imaging films: consideration of the "hump pad." *J Clin Anesth*. 1998;10(4):309-313. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9667347&dopt=Abstract