“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.”

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.

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

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.
A mid thoracic vertebra (usually T-7 to T-1, T-2 spinous processes superior, T-3 1st, 2nd and 3rd anterior ribs are usually inferior to sacral problems/subluxations. This may be compensation for athletic safety. The initiative will boost the health of children and adults, amateur as well as professional sportsmen. The goal is to build an interdisciplinary 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 CIO, Sports Medicine CRISP and is responsible for programmable 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 1 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 Public Health and Health Professions 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

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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™. The ribs usually correct very easily and S to I on the left. Use the sleeve with the narrow fork on both sides. Line of drive is usually I to S on the right side. If there’s counter-rotation, either side may be out.

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 (1 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 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.teddtkorenseminars.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
3. Aldrete JA, Mushin AU, Zapata JC and Ghaly R. Skin to cervical epidural fracture, strengthen and raise the vertebral body to normal height. KST adjustments offer a safer alternative.

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.

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