

THE TORQUE SPECIFIC CERVICAL ADJUSTING INSTRUMENT

By Cecil Laney D.C. (Seen pictured here with Mrs Laney and instrument)



Summary Statement: Dr. B. J. Palmer, after a lifetime committed to chiropractic, concluded that a subluxation could only occur in the cervical area of the spine. If this honored profession accepts that concept, then it must search for the course of action that most efficiently corrects the cervical misalignment. A most revolutionary instrument now promises the upper cervical chiropractor a procedure whereby atlas subluxations can be cleared – consistently and reliably.

Introduction to Atlas corrections: The procedure developed by Dr. John F. Grostic has been proven to be the most effective method for

cervical corrections, and also in proving the performance with post x-rays. Dr. Grostic's procedure consisted of establishing a correction vector, or path through space, for all conceivable misalignments. Calculating certain anatomical and misalignment factors establish this vector.

If Palmer's belief system is to be accepted, and if Grostic's method is indeed superior, a logical question to ponder is why did the method and the focus on the cervical spine not dominate the Chiropractic profession.

The cervical subluxation problem: The great difficulty is that only a few doctors could master the necessary physical skills to send the correct force down the desired vector. The force had to be measured, rectilinear, and incorporate a strange element called torque. Because of this difficulty, some said it was impossible, the profession moved in the direction of least resistance toward procedures that most could perform, such as diversified, which did not require the analyzing time and physical effort called for by Palmer and Grostic.

The solution: Since the accurate adjusting force is so difficult to achieve, and since the objective is to deliver force down a desired path, it can be argued that a precise instrument could be built to perform the task. Indeed, many adjusting instruments have been built over the years with varying

degrees of success. Separate organizations within the chiropractic profession now exist to teach and advocate various systems. It is clear that the most successful of these have been those who have remained close to the Grostic analysis and vector.

I began researching instrument adjusting almost fifty years ago. This work became my Life's profession goal and continues to this day. In 1954, I began designing and building instruments. Several were hand-held models, and table-mounted devices soon followed. At all times and with every instrument I utilized the vector produced by the Grostic procedure.

One table-mounted instrument even included a rotating stylus. This stylus could be made to turn either clock-wise or counter-clockwise. My research, conducted on thousands of misaligned patients, convinced me that a turning stylus had no effect on reducing a subluxation.

The Torque factor revisited: Many techniques have utilized torque in their procedure and over the years have made various claims about what it accomplishes.

The stated purpose of "torque" in the Grostic procedure is to move the axis spinous process. There is so-called "inferior" and "superior" torque. Inferior torque is the term for moving the spinous away from the adjuster, or downward. Superior torque is moving the spinous toward the adjuster, or upward.

The Grostic hand torque does work. But how? Does the adjuster's radius and ulnar crossing over one another cause the pisaform bone to spiral? What effect would this have on the movement of the spinous of axis?

I spent ten years observing the adjustment of thousands of patients, and it became obvious to me that it was the element of more leverage that moved the spinous process of axis. In other words, more height moved the inferior spinouses and less height moved the superior spinouses.

If this conclusion is to be accepted, the upper cervical chiropractor is led to ask why not just add to or subtract from the height factor? This is exactly what the Orthospinology doctors did with the hand- held instrument with great success. However, this modification did not completely solve the problem. The doctor is trying to move the axis spinous and lower cervicals by contacting the transverse process of atlas and therefore using the atlas as a lever. It is now recognized that the stylus – the line of drive – cannot be set over 30 degrees without losing contact with the transverse process since the patient's skull blocks it.



It is unfortunate that many listings [the term used for the correction vector resulting from analyzing the preadjustment X-rays] require this extra leverage to move the spinous. Torque provides the extra leverage. [Note: Preadjustment X-ray on left and post on right].



The question therefore remained. How does the hand torque create more leverage? A careful study of the problem revealed that if the torque was to work, it had to be perfectly coordinated with the toggle and had to be completed precisely simultaneously. The hand torque worked at the point when the torqueing stopped. It created a downward or upward increase in the leverage factor of the force. The process created a rectilinear and angular force in one operation. In other words, a multi-vector force. This realization eluded the profession and stymied the creation of a truly effective adjusting instrument for decades.

This difficulty caused another review of statements from well-known doctors: Two in particular stand out for the insight into the cervical adjustment quandary.

- "Frequently, it is necessary to deliver both a linear and angular motion in the adjustment at the same time. The combination of directing a linear force with an angular force (torque) is required when the axis spinous has misaligned differently from the axis body and atlas." Dr. Ralph R. Gregory.
- "In the Grostic procedure, the torque is used to correct the rotational misalignment between C1 and C2. It is not actually a torque, but rather a change in the line of correction at the very bottom of the thrust." Dr. John D. Grostic.

The Torque factor Solution: The thrusts of these comments, combined with the lack of success with the stylus turning mechanism from the early prototype, led me to the breakthrough. Looking back at the decades of trials, failures, and incremental steps forward, and at revisiting the works cited, it seems obvious now. Unfortunately, it was not so clear at the time.

I built an instrument whose stylus *moved in an angular vector* at the end of the linear portion of the thrust! This discovery was the solution, and the corrections increased in effectiveness by an order of magnitude. I saw the best corrections I had ever seen – consistently and reliably. Moreover, my patients held their corrections for longer periods of time it was a true breakthrough. This vector was the true torque! It was not rotational spin, but angular movement that made it work.

The idea was easy to conceive but difficult to translate into a production model, and the movement toward instrument production ground to a stop for several years, until 1996. In that year, Dr. Sid E. Williams, President and founder of Life University, showed an interest in building an improved version of my table-mounted prototype. This vote of confidence, not only in upper cervical work but also in instrument adjusting invigorated my hopes and plans and those of my colleagues who have wanted to see the upper cervical method—and the instrument—more accepted throughout the profession.

I agreed to manage the production process and assigned Life University all rights to the invention. After investigating various manufacturers, Spinalight, Inc. was chosen as the manufacturer.



Several years of work then went into design and production, and a unit was delivered to the Life University Research Department.

Months of testing then ensued. Dr. Roger Hinson led this work, adjusting hundreds of patients. He was particularly interested in using the instrument on problem cases that other methods had failed to clear. After a favorable report on its value and potential, the instrument was cleared for

production. It is marketed under the trade name, "The Torque Specific Cervical Adjusting Instrument.™"

Life University had Spinalight build several more Torque[™] instruments. They were placed in classrooms and in every Life clinic. The technique and the instrument are now being taught in the regular curriculum. Quote from Dr. Beth Amacher, senior instructor on the Life University faculty, "I believe the specificity and repeatability of this instrument attract the students to this type of orthogonally based chiropractic. The results the students have obtained from the Torque instrument have definitely lived up to Dr. Laney's promise, of a perfect adjustment every time. The post Xrays speak for themselves."

The Torque method: The Torque[™] Instrument is capable of sending a force, both linear and angular, down any vector that is obtained by detailed .X-ray analysis. Aligned with the aid of a laser, it is capable of doing so with the accuracy of the perfectly executed hand thrust. Perhaps the most outstanding function this instrument offers is to duplicate the functions accomplished by a perfectly executed hand torque.

Features of the instrument include these capabilities:

- The excursion (linear travel) can be varied.
- The angular travel can be varied and selected to duplicate inferior or superior torque.
- The speed of the thrust can be varied. It starts slowly and accelerates through the point of recoil. This is a precise imitation of the force administered by the hand toggle.
- After the thrust is complete, the stylus lifts completely off the neck, giving the patient the same feel as a hand adjustment.
- Safety features are incorporated to limit force delivered to the patient.
- The instrument never gets tired or has a bad day. It is a blessing for the less flexible or handicapped doctor.
- It is duplicative since the exact adjustment can be given in the future.
- It has a uniquely designed functional headpiece, which allows more precise patient placement.

Comments from some of the field doctors who have the instrument are notable:

- Dr. Tim Peterson, Bloomer, WI. "The instrument is amazing. We will soon acquire our second one."
- Dr. James K Humber, Smyrna, GA. "The corrections are unbelievable. Likewise, the response of our patients is overwhelming. I have acquired another one from Spinalight."

- Dr. Michael Wagner, Silverdale, WA. "I had three new patients today and zeroed out all three."
- Dr. Mark Myers, Hueytown, AL. "I am making fantastic corrections, better than in all of my twenty years of practice. The patients love it because of the better results."

The results now being shown, after hundreds of patients and thousands of hours of research, indicate a truly outstanding record. The Torque[™] instrument is *clearly* a new standard in upper cervical corrections. See figure one. A correction made by Dr. J. K. Humber, Jr. using the Torque instrument.

There continues to be discussion within the profession about how corrections can be quantified due to the uncertainty of what is "normal." While asymmetries exist in every human body, it is not of the magnitude to invalidate our assumptions. It has been observed for over sixty years that the closer the upper cervical spine is to the orthogonal position, the better the body remains balanced and the longer it can exist without neurological insult. See figure two.

The future: There are some very skillful hand adjusters in the field. This is especially true in the National Upper Cervical Association (NUCCA) group. However, it is highly unlikely that many doctors can match the Torque[™] adjustment because of the almost superhuman skills needed to coordinate the toggle with the torque. Indeed, if the torque is attempted but is not coordinated with perfection, the misalignment can be increased.

It remains to be seen how many doctors are dedicated to excellence. How many will acquire the training and utilize the instrument to make better corrections? The instrument removes the difficult part, which is providing the adjustment. The process is now achievable for anyone.

A person not trained in the Grostic-based procedure could not make use of the instrument and is not eligible to buy it.

Training in the Grostic-based procedure is available from these entities: NUCCA, The Society of Orthospinology and the New Life Cervical Course at Life University.

The tragedy is that billions of suffering people are not yet getting the benefit of this procedure. That is my main concern.

The Torque[™] instrument is now available to the field doctors. If interested, contact Spinalight, Inc. or Life University.

References:

- 1. Dr. Ralph R. Gregory July/August 1981 "Digest of Chiropractic Economics"
- 2. Dr. John D. Grostic Computer Files.