

CAL CHIRO
**Neuro-Skeletal Geometry:
Analysis & Adjusting Phenomenon**

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Introduction & Overview of the Session
History of Neuro-Skeletal Geometry
Origins & Development
Key Milestones in the Field
Theoretical Foundations

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What is in a Head Tilt?

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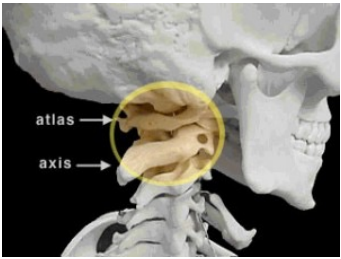
Head Tilt
WHAT DOES IT MEAN?



An X-ray image of a human neck and upper chest. The head is tilted to the right. A white letter 'L' is visible on the left side of the image, indicating the patient's left side.

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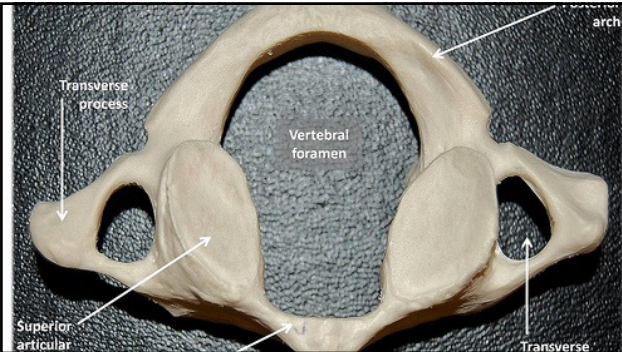
Origins of OTZ



atlas
axis

An anatomical diagram showing the atlas (C1) and axis (C2) vertebrae. A yellow circle highlights the atlas and axis. Arrows point to the atlas and axis labels.

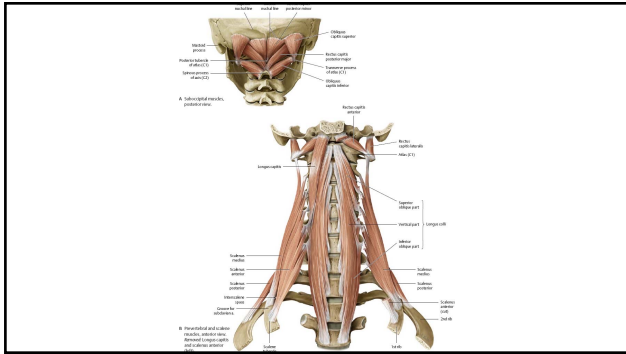
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Transverse process
Superior articular
Transverse
Vertebral foramen
Spinous process

An anatomical diagram of a vertebra. Labels with arrows point to the Transverse process, Superior articular, Transverse, and Spinous process. The Vertebral foramen is also labeled.

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Lower cervical Spine C3-C7 – Coupling

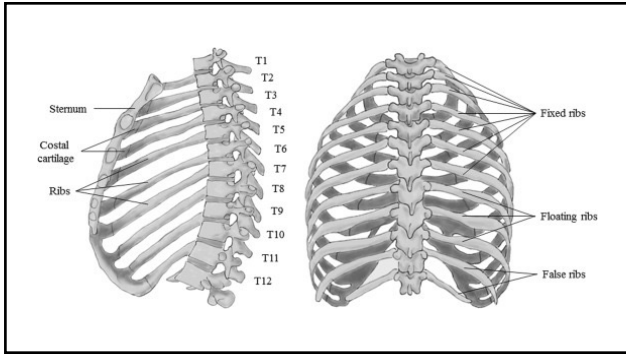
- On lateral bending the spinous processes go to the convexity of the curve
- C2-2° of coupled axial rot for every 3° of lateral bending
- C7-2° of coupled axial rot for every 7.5° of lateral bending
- Angle of incline of the facet joints in the sagittal plane increases cephalocaudally

The diagrams show the spine in three states: LEFT LATERAL BENDING, NEUTRAL, and RIGHT LATERAL BENDING. In lateral bending, the spinous processes move towards the convex side of the curve.

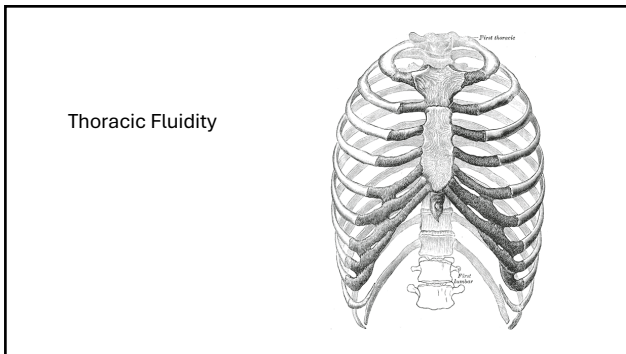
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Reduced lordosis is associated with weakened respiration

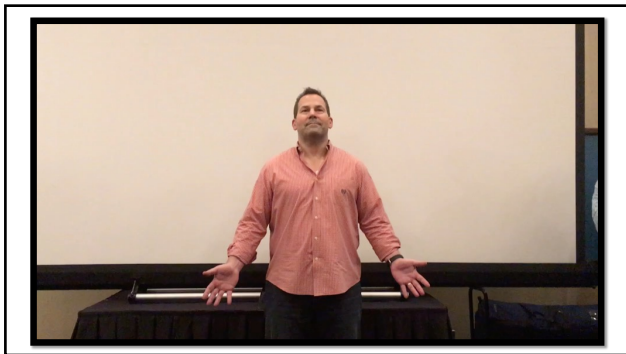
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Theoretical Foundations
 Basic Principles of NSG
 Relationship with Traditional Chiropractic Practices
 Recent Advancements in the field
 Neuro-Skeletal Examination Techniques
 Overview of Examination Procedure Demonstration

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Effect sizes for changes in health and well-being following treatment with the One-to-Zero (OTZ) Technique in individuals with occipito-atlantal joint dysfunction

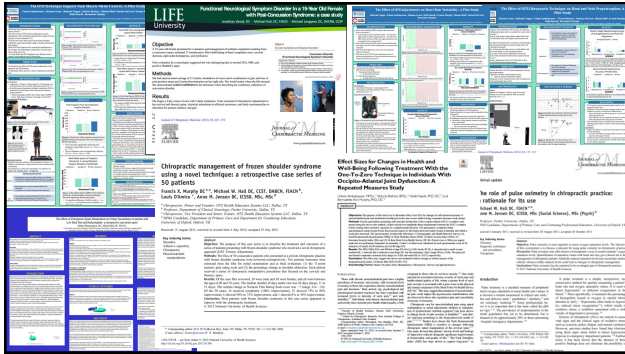
Methods: Twenty patients, presenting with an articular dysfunction at the occipito-atlantal (C0 – C1) complex, completed on-line questionnaires that assessed aspects of the biopsychosocial model of pain, at baseline and post OTZ treatments using Google Forms. The questionnaires included: (1) Demographic and **Health Behavior Survey**, (2) **Neck Bournemouth Questionnaire** (NBQ) or **Neck Disability Index** (NDI), (3) **Beck Anxiety Index** (BAI), (4) **Insomnia Severity Index** (ISI), and (5) **36-Item Short Form Health Survey** (SF-36). Paired t-test or Wilcoxon Signed Ranks Test was performed, dependent on normality. Cohen’s d values were calculated for each questionnaire score (0.20 indicative of small, ≥ 0.50 medium, and ≥ 0.80 large ES).

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Results: The NDI and NBQ scores decreased (both large ES ($d = 1.75$ & $d = 2.32$, respectively)). Levels of anxiety, and severity of insomnia decreased ($d = 1.21$ & $d = 0.73$, respectively). All subscales and component summary scores of the SF-36 significantly increased, with the physical and mental component summary having a large ($d = 0.88$) and small ES ($d = 0.35$), respectively.

Conclusion: Changes in various aspects of the biopsychosocial model suggest that the OTZ treatment model has the potential to improve functionality, psychosocial factors and quality of life in those with an articular dysfunction at the C0 – C1 joint complex.

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<p>Fear Paralysis Reflex Withdrawn, shyness, tantrums, anxiety</p>	<p>Tonic Labyrinthine Reflex (TLR) Lack of concentration, difficulty sitting upright, and motion sickness</p>	<p>Symmetrical Tonic Neck Reflex (STNR) Walking on toes, poor posture and coordination, slouches at desk</p>
<p>Asymmetrical Tonic Neck Reflex (ATNR) Easily distracted, poor coordination, messy handwriting, poor memory, possible obsessive behavior</p>		<p>Moro Reflex Over-reactive and over-sensitive (Common in ADHD)</p>
<p>Spinal Galant Reflex Trouble sitting still, poor bladder control, (bedwetting after age 5)</p>	<p>Palmar Reflex Jumbling up letters, poor writing expression and spelling</p>	<p>Juvenile Suck and Rooting Reflex Speech, articulation and dental problems</p>

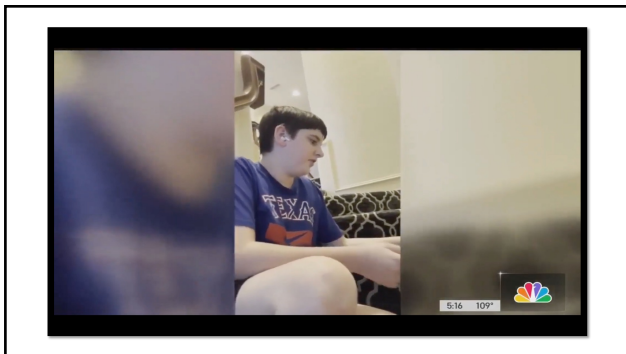
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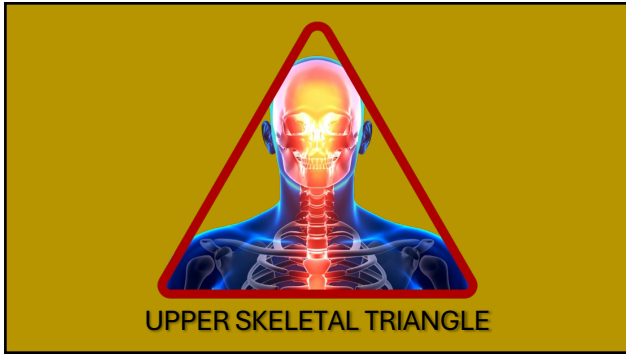
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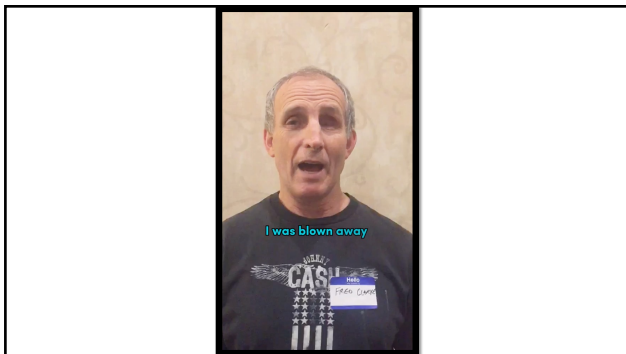
Review of Real Case Scenarios

Video Demonstrations of Treatment Techniques
Discussions & Insights
Practical Demonstration of Technique, Hands on Session

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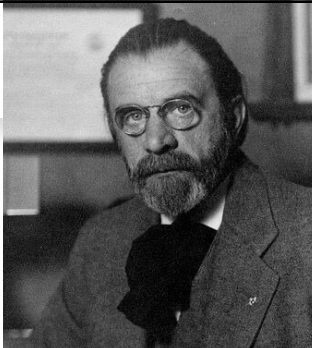


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These are the last printed words of Dr. B. J. Palmer, the developer of Chiropractic:

You HAVE in YOUR possession a SACRED TRUST. Guard it well.

B.J. Palmer D.C. – Developer of Chiropractic
Volume XXXVII – The Glory of Going On - 1961

A black and white portrait of Dr. B. J. Palmer, an older man with a full beard and glasses, wearing a suit and tie.

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Time always has and always will perpetuate those. Chiropractic is no exception to the rule. My illustrious father placed this trust in my keeping, to keep it pure and unsullied or defamed. I pass it on to you unstained, to protect, as he would have you do. As he passed on, so will I. We admonish you to keep this principle and practice unadulterated and unmixd. Humanity needed then what he gave us. You need now what I give you. Out there in those great open spaces are multitudes seeking what you possess.

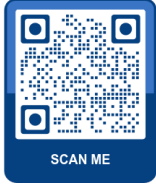
The burdens are heavy; responsibilities are many; obligations are providential; but the satisfaction of traveling the populated highways and byways, relieving suffering and adding millions of years to millions of suffering people, will bring forth satisfaction and glories with greater blessings than you think. Time is of the essence.

May God flow from above-down His bounteous strength, courage and understanding to carry on; and may your Innate receive and act on that free flow of Wisdom from above-down; inside-out... for you have in your possession a Sacred Trust. Guard it well.

B.J. Palmer D.C. - Developer of Chiropractic
Volume XXXVII - The Glory of Going On - 1961

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Any Questions?



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