

## BACK BUBBLE THERAPY

### THE EFFECTIVENESS OF PRECISE TRACTION FOR LOWER BACK PAIN



Study conducted by Dr. George Sargetis,  
D.C., Q.M.E.

Palmer College of Chiropractic  
Advanced Training:  
Certified Chiropractic Extremity  
Practitioner  
Certified in Chiropractic Rehabilitation  
Certified Disability Evaluator  
State Appointed Qualified Medical  
Evaluator

Member:  
American Chiropractic Association  
Valley Hi-Laguna Creek Rotary Club



### INTRODUCTION

Lower back pain is a prevalent problem throughout the world. With an annual incidence between 1% and 8% (2.5 million to 20 million people in the United States) and lifetime prevalence between 31% and 80%. The cost in the United States approaches \$100 billion dollars. Walker reports that 10% to 25% of those who develop chronic back pain are responsible for 80% to 90% of the associated cost.

Historically, the treatment of lower back pain has involved lumbar traction devices of various sorts dating back to the time of Hippocrates, in all of the major civilizations, to the present time. These various traction devices have sometimes been proven effective in relieving lower back pain and sciatica by means of distracting the

vertebral column which essentially distracts the spinal facet joints, paraspinal musculature and discs. As such the theory of traction would address the three major causative factors of lower back pain.

Invented in 1983, The Back Bubble® (Solana Beach, California) traction device has been used in both clinical and home settings proving its value on an individual basis with some 5,000 units currently in use. I have used The Back Bubble traction device in my clinical setting on a daily basis for the majority of patients exhibiting lower back pain for the last three years. This study demonstrates the effectiveness, ease of use and immediacy of results on a random group of individuals exhibiting lower back pain who consented to its use.

## METHOD OF STUDY

Random test subjects voluntarily complied to test The Back Bubble traction device after observing the method of traction on an individual. The majority of these people viewed a demonstration video and was instructed utilizing visual posters. Subjects were placed in either the low inverted or upright postures (see figure-1). These two primary traction positions utilize unique force vectors to produce exact traction to the lower spine, facets and muscles. In the upright position the lightweight inflatable device surrounds the abdominal area as the patient pivots his or her weight over the device. In the low inverted position, The Back Bubble device is placed around the pelvis and the individual slightly reclines as he or she walks downward towards the floor. Simultaneously the individual raises both flexed knees while reclining the upper body to the floor. The lower spine is placed in a flexed and distracted position. The low inverted position has the advantage of isolating the location of the stretch while stretching the hamstrings.

In both postures The Back Bubble® device is unique in that variations in body position and/or placement of The Back Bubble® is made to find maximum relief in both lower back and/or radicular pain if present. It takes approximately 5 to 15 seconds to position an individual for maximum relief of lower back pain. In this study the individuals remained in the pain-relieving traction position from 2 to 5 minutes. Once the traction was completed each person stood and reported per a visual analogue scale the degree of their pain.



Figure 1 – Lower Inverted Posture



Figure 2 – Upright Posture

## RESULTS

Twenty people were selected for this trial study. They were questioned in terms of their known medical diagnosis and the length of time they had been in pain. They graded their degree of pain on a color visual analog scale from 0 to 10. (0 grading at no pain; 2-3 mild; 4 discomforting; 6 distressing; 7-8 horrible, 9-10 excruciating). This random group of individuals graded

their pain level before, during and after The Back Bubble® traction device use. In addition, they graded the quality of their pain in terms of achiness, stabbing, burning, pins and needles or numbness on a picture diagram of the body.

(See table 1 – Results)

## RESULTS

TABLE-1 - Before, during and after using The Back Bubble® traction device.

Diagnosis	Pain	Age	Time in Pain	Before	During/ % Change	After/ % Change
DDD	A T LBP	49	30 years	3	0/100	0/100
OA, Dh	A LBP	63	(?) years	4	0/100	0/100
DDD	P-N LSc	50	20 years, severe last 2	6	0/100	0/100
?	S LBP	37	10 days	9	0/100	1/89
Mp	RLBP	35	1 day	7	0/100	0/100
Mp	R A LBP	49	2 months	4	0/100	0/100
Sdyl	R P-N S Sc	38	10 months	7	0/100	0/100
Sc	R A LBP	--	(?) years	4.5	0/100	2.25/50
S-C	A LBP	--	10 years	9.5	0/100	0/100
Rsc	R B LBP	--	(?) years	5.5	0/100	0/100
Lsc	L B LBP	--	1 ½ years	5	0/100	0/100
?	S LBP	34	3-4 years	3	0/100	1.5/50
?	A LBP	39	(?) years	3	0/100	1/67
?	S LBP	34	5 years intermittent	2	0/100	1/50
?	A LBP	--	15 years	7.5	0/87	1.5/80
?	R T LBP	50	1 year approximately	3	0/100	0/100
?	L4-5 A	27	6 years	3	0/100	0/100
?	L4-5 St	34	4 days	5	0/100	0/100
?	L4-5 A P	28	6 years	5.5	0/100	0/100
?	R B A N Sc	40	4 years intermittent	3	0/100	0/100
<b>Average percent pain reduction</b>					<b>99.35%</b>	<b>89.3%</b>

Dh: Disc Herniation  
 OA: Osteoarthritis  
 Sc: Sciatica  
 S-C: Spinal Curvature  
 Sdyl: Spondylolisthesis  
 A: Aching  
 B: Burning  
 DDD: Degenerative Disc Disease  
 L: Left

LBP: Low Back Pain  
 Mp: Muscle Pull  
 P-N: Pins and Needles  
 N: Numbness  
 P: Pain  
 R: Right  
 S: Stabbing  
 St: Stiffness  
 T: Throbbing

## CONCLUSIONS

Lower back pain is a disabling disease highly prevalent in the United States and Western World. The results of this trial study shows a highly significant relief of lower back pain achieved by the random general public, exhibiting random pain intensity and longevity. It is interesting to note that one-half of the individuals treated do not have a known medical diagnosis. Once familiar with The Back Bubble® traction device and its use through visual training per video and poster, this study demonstrates both the ease of use and effectiveness of the use of this device on an individual basis.

The individuals tested showed an average 99.35% relief during and 89.3% post demonstration. The inventor of this device feels through his years of demonstrating this device to the public that The Back Bubble® traction device has an accumulative effect in reducing more severe cases of back pain if used more frequently on 5 to 15 minute intervals 2 to 5 times per day. In addition, the frequency of use should be gradually increased with time. The repeated use of lumbar traction depends on the severity and chronicity of lower back pain.

In the practice of chiropractic our general premise and treatment goal is to reduce the subluxation, relieve physical pressures on the spinal nerve roots, improve spinal function/mobility and reduce pain per the adjustive procedure. To that end, therapeutic modalities are incorporated with the general chiropractic practice such as ultrasound, muscle stimulation, intervertebral traction, manual massage therapy and exercise therapy. The Back Bubble® traction device offers specific traction, which offers an ideal adjunct to the chiropractic premise and treatment goal. The Back Bubble® traction device not only assists in achieving the primary goal of reducing nerve or facet joint pain but can also rehabilitate the patient to achieve greater strength and flexibility in the complex chain of the legs, pelvis and spine. In the three years of daily clinical use of The Back Bubble® traction device it is my experience that it can safely be used with minimal training for the general public for various conditions causing lower back pain. The stretching effect that this device provides will effectively reduce lumbar paravertebral myospasm. This specific traction effect will relieve intradiscal and nerve root pressure as all test subjects in this study had significant immediate relief once a relieving position was found.

It is my conclusion that repetitive use of The Back Bubble® traction device will have an accumulative effect in stopping the pain, spasm cycle in people with lower back pain. It is also my finding that The Back Bubble® traction device is safe and easy to use based on the findings of this study. At home the device used twice daily for the moderate case can effectively control the cost of lower back pain in the United States.

Further studies should be performed to further analyze the effectiveness of The Back Bubble® traction device for lumbar facet syndrome, lumbar intervertebral disc syndrome and lumbar muscle strain syndrome as well as intervertebral disc syndrome with radiculopathy. Improved lumbar extension, range of motion is predictable but not yet studied. This study showed relief of pain in a random group of individuals with a variety of lower back pain due to a mixture of different causes. It is my prediction that the use of this device may best be seen with particular disease processes of the lower spine. However, this study shows that people gained highly significant relief from a variety of lower back ailments.

GEORGE S. SARGETIS, D.C., Q.M.E.

1. Walker. BF Australasian Chiropractic & Osteopathy. 1997 NOV. 6(3). Pp 95-6