SUMMARY of PILOT STUDY

Conducted by: Mayo Clinic Supervised by: John Leslie, M.D.

Subjects Conditions

- Herniated Discs
- Bulging Discs
- Degenerative Discs
- Failed Back Surgery
- Facet Syndrome

Prior to Treatment

- Average Pain Score 6.4 Out of 10
- Pain Greater Than 6 Months

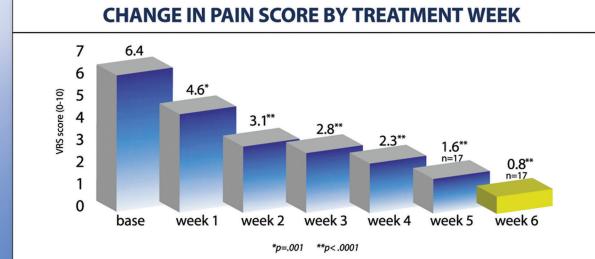
6 Week Treatment Protocol

• 20 Treatments

Post Treatment

- Average Pain Decreased to 0.8 Out of 10
- Decreased Pain
- Improved Function
- Required Fewed Analgesics After Treatment
- No Safety Issues or Adverse Effects





Presented At:

American Academy of Pain Managemer AAPM 18th Annual Clinical Meeting Sept. 27-30, 2007 | Las Vegas, NV **lew York State Society of Anesthesiologists** .1st Post Graduate Assembly in Anesthesiol Dec. 7-11, 2007 | New York, NY merican Conference in Pain Medicine Pair II 4-5, 2008 | New York, NY Fel

Study Team:

John Leslie, MD¹, Charlotte Richmond, PhD², Alex Macario, MD³, Christian Apfel, MD⁴, Frank Florio, DC⁵, Darren Clair, MD⁶, Martin Auster, MDˀ, Joseph Perfolizzi, MD²-¹Mayo Clinic Arizona, ⁴NEMA Research, ¹Stanford University, ⁴University of California at San Francisco, ⁴Axiom Worldwide, ⁴Vibrance Medical, ¹Johns Hopkins University



(816) 795-1121

GrayChiropractic.com

Dr. Leslie of the Mayo Clinic Proves Spinal Decompression to be Up to 88.9% Effective for NECK and BACK PAIN!



PILOT: Effectiveness & Safety of Non-Surgical Spinal Decompression



GrayChiropractic.com



ABSTRACT

OBJECTIVE: Prospective, multicenter, phase II, non-randomized, clinical study to evaluate the effectiveness and safety of the Axiom Worldwide DRX9000™ for active treatment of chronic LBP utilizing a standardized clinical research multimodal protocol.

METHODS: 20 patients with chronic LBP based on a diagnosis of musculoskeletal or mechanical LBP, herniated discs, bulging or protruding discs, degenerative disc, pain from failed back surgery more than 6 months previously, posterior facet syndrome or sciatica underwent a series of 20 DRX[™] treatments (28 mins each) for 6 weeks with 5 sessions the first week tapering to 1 session/wk. Treatment multimodal protocol included ice after DRX[™] sessions, lumbar stretching exercises, and adjunct analgesics as required. Assessments of pain, analgesic use, functionality, satisfaction, activities of daily living and safety were collected through examinations, questionnaires and patient diaries.

RESULTS: 18 evaluable subjects (33.3% female, 83.3% white, mean age 46.6, 77.8% employed) had mean pain score 6.4 on a 0 to 10 scale (0=no pain 10=worst pain) prior to first DRX™ treatment that decreased to 0.8 after last DRX™ treatment. 88.9% of patients (16 out of 18) reported an improvement in back pain, and better function as measured by activities of daily living. On a 0 to 10 scale (0=Not satisfied 10=Very satisfied) patients rated the DRX9000 an 8.1. No patient required any invasive therapies (e.g., epidural injections, surgery).

CONCLUSION: Overall, patients' pain improved after DRX™ treatment, requiring fewer analgesics, with better function. There were no safety issues identified with the multimodal treatment routine. Non-treatment or control groups were not included making efficacy outcome versus placebo or spontaneous recovery difficult to determine. Randomized double-blinded or comparative long-term outcome trials are needed to further prove the efficacy of the DRX9000™ non-surgical spinal decompression system for the routine treatment of chronic LBP.

BACKGROUND

- Paucity of literature on benefits of non-surgical spinal decompression over other non-surgical treatments
- Previous studies are poorly designed
- Results are descriptive in nature
- Efficacy versus placebo or spontaneous recovery difficult to determine
- Over 1,200 DRX9000™ in use today

MATERIALS AND METHODS

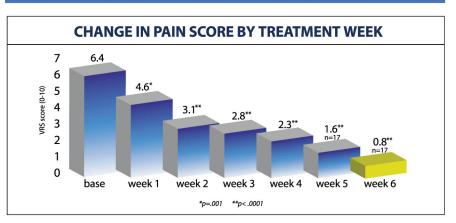
METHODS

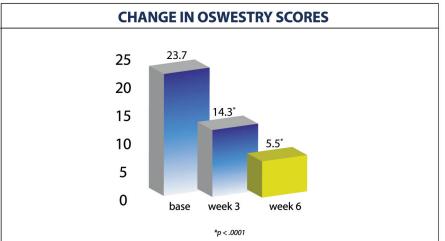
- Prospective, multi-center, phase II, non-randomized clinical trial
- 3 free-standing clinics (2 MDs and 1 DC)
- Diagnosis: Low back pain > 12 weeks
- Outcome measures assessed:
 - Daily Pain Diary
 - Verbal Rating Scale (VRS)
 - Oswestry Pain Questionnaire
 - Adverse Events
 - Satisfaction Survey

TREATMENT PROTOCOL

- DRX9000™ sessions
 - 28-minute sessions for 6 weeks
 - Total of 20 treatments
 - 5 sessions week 1 & 2
 - 3 sessions week 3 & 4
 - 2 sessions week 5 & 6
- Additional Therapy
 - Ice therapy post DRX™
 - Back exercises after week 2

RESULTS





SATISFACTION SURVEY				
Satisfaction by Week		Would you recommend DRX9000™ to anyone else?		
Week 3 7.6	Week 6 8.1	Yes 88.9%	No 11.1%	

RESULTS

DEMOGRAPHICS					
1	Total Number of Subjects = 18				
Male	66.7%	Mean Age	46.6 yrs		
LBP Symptom Duration (mean)	526 weeks	Mean Height	175 cm		
Employed	77.8%	Mean Weight	102 kg		
Retired	16.6%	White	83.3%		
Other	5.6%	Hispanic	16.7%		

FAILED THERAPY PRIOR TO DRX9000™				
Procedure	#		Procedure	#
Chiropractic	16		TENS	5
Muscle Stimulation	10		Acupuncture	3
Ice Therapy	9		Lumbar support	3
Massage Therapy	9		Epidural Injections	3
Exercise	6		Facet Injections	1
Heat	5		Ultrasound	1
Physical Therapy	5		Other Decom- pressive Therapy	1

SUMMARY OF LOW BACK PAIN				
DIAGNOSIS			LOCATION	
Bulging/Protruding Disc	15		L1-L2	1
Degenerative Disc	8		L2-L3	3
Herniated Disc	6		L3-L4	4
Posterior Facet Syndrome	2		L4-L5	14
Failed Back Surgery	1		L5-S1	12

ADVERSE EVENTS			
Adverse Event	Related to device	Adverse Event	Related to device
Neck Pain	Possibly	Shoulder Pain	No
Head Cold (2)	No	LBP/flu-like symptoms	No
Sinus headache (2)	No	Vertigo	No
Sinus infection	No	Adrenal Insufficiency	No

Disclaimer: This study was funded by Axiom Worldwide, LLC.

CONCLUSION

- A 6-week course of 20 DRX9000™ treatments significantly reduced the severity of chronic LBP in 89% (16 of 18) of treated patients from 6.4 to 3.1 after 2 weeks and to only 0.8 (scale 0-10) after completion of treatment
- Oswestry Disability scores improved from 23.7 to only 5.5 at end of therapy
- Adjunctive pain medication consumption was decreased by DRX9000™ treatments
- No significant adverse events or safety issues resulted from DRX9000™ treatments
- The DRX9000™ shows great promise in treating chronic LBP arising from multiple causes
- Comparative outcome trials utilizing a set of standardized and validated multiple outcome variables, as was utilized in this study, are being planned to document the value of DRX9000™ non-surgical spinal decompression system in routine treatment of chronic LBP