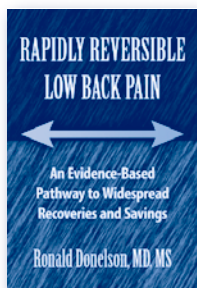


# moving in the right direction

Mechanical Diagnosis And Therapy®  
of the spine and extremities

## ▶▶ A Book For Everyone Involved in Low Back Care

Stacey A. Lyon, MIUSA Executive Director



Imagine a book that could help your patients, your referring physicians, occupational and health plan doctors and nurses, and even case managers improve their overall understanding of low back pain (LBP) and, in particular, what MDT has to offer. That is what many LBP stakeholders are realizing about "Rapidly Reversible Low Back Pain – An Evidence-Based Pathway to Widespread Recoveries and Savings" by Ron Donelson, MD, MS. (RRLBP)

Joseph G. Maccio, MA, PT, Dip. MDT of Troy, NY took an aggressive stance to use this book as a tool to communicate with physicians. His letter campaign inviting numerous physicians in his area to request a free copy of the book highlighting its value as a resource was successful with several requests. In his review posted on Amazon.com, Joe noted:

*"This is a book that should be read by everyone involved in low back pain care. Insurance companies and employers involved in paying into the \$90 billion a year low back dilemma should be particularly aware of the lack of evidence for very expensive and often ineffective diagnostic testing and treatments. Donelson's analogy of how these costs could be significantly reduced simply by using MDT as a presurgical gold standard is enlightening. For our patients, this book will allow them to make informed decisions regarding low back care. For PTs who are not trained in MDT, this an excellent reason to begin training. Very often PTs look for studies to support what they do and are often frustrated by the lack of valid research. Donelson's book is an almanac of relevant literature and scientific studies that confirm the importance of Mechanical Diagnosis and Therapy. For those of us who have advanced training in MDT, it is a wonderful read as it validates what we see in the clinic on an everyday basis. It is an excellent reference book that helps explain to industry, insurance carriers, referral sources, and patients that what we do as clinicians not only produces extremely good results with minimal expense but has a wealth of scientific data to support it as well."*

From recent discussions on the MDT listserv, Mitch Miglis, DC, Cert MDT had this to say: *"... a superbly readable book. I have read it twice. Its concepts are powerful and easy to convey in a presentation. I have done two presentations using your material, one to a family practice group and another to a Workers Comp managed care group of physicians. I found ample material from your work to tailor each talk to their specific interests and needs. In addition, one of the family docs referred a patient to me whom I treated with MDT. Turns out he was the president of a large employer's health management system. He was quite curious about the McKenzie Method and I gave him a copy of your book. He read it in one weekend and he says he would like to meet to discuss corporate back care strategies. RRLBP has enabled me to take my McKenzie training to a higher conceptual level. Grasping the bigger picture has given me additional confidence in using MDT as well as a greater ability to explain*

*it whenever I can. Thanks again for an outstanding contribution to back care."*

In his book review in the current issue of the Journal of Manual and Manipulative Therapy (Vol 15, No. 3), Peter Huijbregts, the Co-Editor-in-Chief wrote this:

*"The stated goal for this text is to discuss controversies and obstacles to research, diagnosis, and management of low back pain (LBP); a second goal is to discuss clinical characteristics of LBP that should influence the management of and spending related to LBP. The intended audience for this text is diverse and includes patients, third party payers, clinicians, researchers, and those involved in the disease management industry.*

*The author of this text is a well-known authority on research and management of LBP. References in this text are recent, comprehensive, and support a compelling argument for increased attention to the MDT paradigm both in clinical management of LBP and with regard to guideline development for this problem. Although the emphasis is clearly and admittedly on the MDT approach to LBP, all clinicians, researchers, and, especially guideline developers should read this text. The clear explanation of the foibles of randomized controlled trial involving heterogeneous groups of patients at the basis of current guidelines and the ADTO (assessment-diagnosis-treatment-outcome) paradigm offered in its place alone makes this text worth reading. Add to this that this book reads not like a dry presentation of research but almost like a novel one will find hard to put down and my recommendation that all clinicians and researchers involved with LBP should have a copy in their library becomes even more self-evident." (Reprinted with kind permission from JMMT. Source: <http://jmmtonline.com/current/>)*

Dr. Aubrey Swartz, Founder and Executive Director of The American Back Society, wrote in the most recent issue of the ABS Newsletter: *"RRLBP is a tribute to Ronald Donelson who has devoted his professional career to teaching health care providers throughout the world this marvelous clinical process with the ultimate goal of improving low back pain outcomes while reducing costs."*

Finally, Robin McKenzie himself, and Lawrence Dott, the CEO of the McKenzie Institute International, wrote that RRLBP is "one of the major advancements of MDT in the history of the Institute.... We strongly recommend Dr. Donelson's book to you and all your colleagues."

So, perhaps you owe it to yourself, your company and your patients to read RRLBP and to provide copies strategically in your community. The book is available at [www.optp.com](http://www.optp.com) and [www.amazon.com](http://www.amazon.com). We welcome further feedback from those who have read it.

### In This Issue:

- Guest Commentary
- Clinical Tips
- Case Study
- Business Corner
- Website Update!

## ►► Extremities – A Place To Start

Amanda Dalcourt, PT, Dip MDT

Most McKenzie trained clinicians rapidly become confident and comfortable applying the principles to the spine and yet are unable or hesitant to make the transition in the extremities. Shoulder derangements are a common phenomenon; this clinical tip may give those who have been reluctant to explore the extremities somewhere to start.

We have probably all heard of, or at least tried, the 'hand behind the back' (HBB) towel stretches for our shoulder patients. This also happens to be a common directional preference for shoulder derangements, especially when this movement is painful and limited (blocked). When considering the gross movements involved in HBB, there is a combination of glenohumeral joint (GHJ) extension, internal rotation and adduction. Repeating HBB combines these movements and each component can be explored when attempting to find that directional preference and reduce the derangement.

Before beginning repetition of HBB in your repeated movement testing, it is important to **establish baselines!!** Often enough, there are significant changes in both AROM and resisted testing after repeating this movement.

First, establish the presence or absence of resting pain. Then, ask the patient if there is a particular movement that bothers him/her every time it is tried. If none comes to mind, re-check either abduction or flexion AROM (this is often enough) and note if there is PDM, ERP or any movement loss. Another option is to test resisted abduction at either 30 or 90 degrees. These four test movements are the ones that I find to be positive AND changed most often (symptomatically and mechanically) following RHBB. It also goes without saying that the AROM of HBB would nearly always be restricted on baseline and on re-evaluation also usually improves significantly. I simply like to use a movement other than the one that is being 'exercised' to stress the fact that numerous movements (mechanics) will improve upon completing a series of repeated movements in agreement with the directional preference of that specific deranged joint.

Once the presence or absence of resting pain, and the 'test movement' have been identified, begin the repeated movement testing. After a series of 20 – 30 reps, re-check the baseline of pain and then re-check the 'test movement'. Sometimes you may need as many as 60 – 80 reps to identify a directional preference. If the patient has difficulty relaxing, it may be beneficial to repeat this movement with a therapist-generated repeated movement test, in order to establish directional preference.

I have found that sometimes a key to success is that the arm being stretched is completely at rest. At times, it helps if the therapist actually performs the movement repetitively for the patient, in order to help them get the 'feel' of the movement, the rhythm and the speed required for success (please refer to figures 1 and 2 to see therapist and patient positioning).



Figure 1: Start Position



Figure 2: End Position

A rhythm of 'pressure on, pressure off, pressure on, pressure off' is continued at a good speed until the patient realizes both symptomatic and/or mechanical changes. It takes about twenty seconds, for example, to complete 5 RHBB (i.e. 1 second for 'pressure on' and 3 seconds for 'pressure off'). It has become my habit to 'shake' the client's arm, via my hand gripping the elbow when in the start position, into very minimal abduction and adduction rhythmically a few times, to help enhance continued relaxation of the arm between repetitions.

The first movement that I attempt to help him/her regain is the adduction part of the combined movement. For this, the shoulder is in some extension and the hand is brought around back towards the contralateral buttock and beyond the waist. To check ROM of this component before beginning RHBB, I usually ask the patient to see if they can reach around the other side of their waist from behind and compare the two sides. (See figure 3) Compare how far you can see his/her fingers stretch beyond the waist -- or not and whether or not there is PDM or ERP. Use this ROM test as your own baseline for after the repeated movement testing has been performed.



Figure 3

The repeated movement is then performed, with the emphasis being on exploring the adduction part of the movement. The strap is held in such a way that the arm to be stretched is completely at rest and the arm doing the stretching is at an advantage, so as not to 'stress' the other shoulder too much! I find that if the active elbow is tucked in at the waist and pulls the other arm via elbow flexion, there is more Bicep work and less shoulder 'fatigue' in most cases (see figures 4 and 5).



Figure 4



Figure 5

If the patient has enough ROM, a strap may not even be necessary. They may be able to grasp the wrist of the arm to be stretched with the hand of the arm doing the stretching (see figures 6 and 7).



Figure 6



Figure 7

Symptoms during and after repeated movements are evaluated. If they are worse this is not the directional preference, if better a directional preference is confirmed and if they are no better/worse then more reps or force may be needed ... if there are still no lasting changes another component of HBB can be explored. For example, he/she can explore up-the-back component. This can be achieved by changing the position of the strap and the starting position of the arm (see figures 8, 9 and 10).



Figure 8



Figure 9



Figure 10

Continued from previous page

If the patient seems to experience worsening pain, see if the response is different when the movement is passive only. (If the pain is again worse as a result then it may be that this is not the directional preference and other movements can be explored)

One way to verify that the movement is passive is by looking at the position of the shoulder girdle at the extreme position of stretch. You may notice that the patient is shrugging the shoulder being stretched in an upward direction. Encourage the patient to let his/her shoulder 'drop' to the floor (i.e. drop the shrugging movement).

Another movement to verify is the rotation component. When in the extreme of the stretch, check to see if the elbow of the arm being exercised relaxes forward upon cng the arm into more internal rotation. There often seems to be a protective movement, whereby the scapular muscles contract and adduct the scapula somewhat, in order to prevent too much internal rotation of the shoulder. Often times, when the patient relaxes the 'shrug' in his/her shoulder, you will see the elbow relax forward also.

Once the patient sees and feels the difference that RHBB makes, he/she will be encouraged and enthusiastic to continue! Encourage the patient to continue at home, as often as deemed necessary based on his/her own symptoms and mechanics. Also, be sure to remind the patient to verify the 'test movement' before and after his/her exercise session to ensure proper progress, both symptomatically and mechanically.

The same symptomatic and mechanical baselines need to be checked and performed prior to repeating the exercise and upon completion as well. This represents the built-in safety mechanism to ensure appropriateness of the chosen technique. Once the patient regains ROM, they can progress to **achieve end range**. He/she can change the position of the active arm, to a position of full elevation (see figures 11 and 12). By straightening the active arm up above his/her head, the patient will be able to pull the passive arm higher up between the scapulae.



Figure 11



Figure 12

Clinically, I have found this to be one of the common directional preferences when treating a shoulder derangement and it would certainly be a good starting place for those wanting to explore the extremities. Try it yourself to see!

*Many thanks to Richard Rosedale, PT, Dip MDT for reviewing and making suggestions to this clinical tip!*

## ▶▶ MDT Success with Chronic Shoulder

*Yvonne Body, PT, Dip. MDT & Richard Rosedale, PT, Dip. MDT*

A 57 year old telecommunications worker presented with an onset of right shoulder pain for no apparent reason. She has also experienced a recent onset of right hand numbness. Symptoms in right shoulder have been present for approximately 6 months.

**April 18:**  
Initial examination\*

**April 19:**  
Patient reports pain is now intermittent and overall is feeling 50% better. Shoulder ABd ROM demonstrates no loss and no effect with movement. Home exercise program of repeated hand behind back with overpressure was reviewed. Confirmed provisional classification of derangement with directional preference to hand behind back.

**April 24:**  
Patient reports feeling approximately 75% better. Shoulder ABd ROM demonstrates no loss and no effect with movement. Hand behind back ROM demonstrates no effect with movement. ER demonstrates no loss of ROM and no effect with movement. Patient is demonstrating an excellent response to mechanical therapy and is encouraged to continue exercise 3-4 x a day.

**April 30:**  
Patient reports no recent pain experienced. Shoulder ROM demonstrates nil loss in all planes and no pain present. Symptoms appear resolved. Patient is to return in approximately 1 week for discharge.

### May 5:

Patient reports feeling nearly 100% with only negligible pain to report, approximately 1/10 with a 56/64 on an Upper Extremity Functional Score. Shoulder ROM demonstrates nil limitations in all planes and no pain present. Exercises were reviewed and patient education of maintaining hand behind back and extension ROM were discussed for prophylaxis. Symptoms appeared to be resolved and patient was discharged.

### Discussion

Over the first 24 hours, the patient was able to take her constant symptoms of 6 months in duration, make them intermittent, and 50% better. By the third visit, she was 75% better and by the fourth visit, 12 days after the initial exam, she described "no recent pain". Over the course of 3 and a half weeks and 5 visits, this patient was able to independently reduce, abolish and maintain the reduction of her symptoms by utilizing self generated forces. The patient was able to return to all activities without limitations.

Mechanical Diagnosis and Therapy is based on the symptomatic and mechanical response to loading strategies. This enables you to better classify your patients and develop an appropriate treatment program for their individual needs. The literature supports the role of patient education, empowerment and exercise. Mechanical Diagnosis and Therapy does just that, and more.

*\*For details of the examination findings, please refer to the full completed assessment form posted in this issue on our website in the new MDT Resource Center.*

## ►► Yellow Pages Advertising: Waste of Money Or Hidden Gold Mine?

By David C Steinberg and Trent A Wehrhahn, Principals, PTreferralMachine.com © 2007

If you're like most health care professionals, you cringe every year at the sight of the Yellow Pages contract renewal form. Ads of any substance are expensive, and this kind of elective expenditure, naturally, leads you to question why you would let the Yellow Pages sales rep dig her fangs into your checkbook. But when you have the right information *and* the right *strategic* approach, you may find the Yellow Pages could be one of the most efficient advertising options available.

### Begin With Two Kinds Of Key Information

**First**, are your patients and prospects using the yellow pages to find a physical therapist? Here's what we know; In 2006, the Physical Therapy heading attracted **7.6 million** references.<sup>1</sup> That means a community of 100,000 people would have about 2,500 people looking in the physical therapy section during the year; the 2500 people who go to the section are not simply curious, they are looking for a provider to *choose now*. Each visitor looks at an average of 4.6 ads, and makes an average of 2.1 calls. In our small market example, that's 5,250 phone calls! Those stats are pretty impressive, agreed? So it stands to reason that the Yellow Pages in your area deserve serious consideration. But be careful, because deciding to invest in a display ad is just the beginning of a successful placement. If your ad isn't written and designed properly, chances are you will not get your share of calls.

**Second**, see who else advertises in the section, what kind of ad they run (size, color, position), and find out how long have they been advertising. If you see the same advertisers running bigger and bigger ads every year, what conclusion can you draw from that? If you assume it's because "they can afford it, so it's no big deal for them," we would say maybe, but this is probably the *wrong answer*. To find out for sure, you may find it worthwhile to do some business intelligence (to get tips on how to do this visit [www.PTreferralMachine.com/AdTips](http://www.PTreferralMachine.com/AdTips) ).

### Implement The Right Strategy And Get More Than Your Share Of Calls – Guaranteed

*What does your competition say in their ads? What do the ads do to educate readers about what they need to know when choosing a therapist?* Typically, most YP advertisers use the same strategy. They all headline the company name, insert a cute tag line, list a menu board of services, and offer contact information. This is the traditional approach that has been recommended by Yellow Page sales representatives and layout people since the beginning of the directory. To see what we mean, open up your local Yellow Pages. Can you see how *the strategy is almost identical with each advertiser?* From the reader's standpoint, they all seem to say the same thing; "We are a physical therapy provider, located at [fill in the blank], we do back pain and sports injuries and other stuff with names that mean something to us but not to you, we accept all insurance, we have professionally trained/licensed staff, flexible hours, and, oh, by the way, just in case you forgot what they look like, here's some little pictures of the credit cards we accept. And, if space permits, you'll even get to see some pictures of smiling patients. Well, aren't all those things you would expect from *every* professional physical therapy clinic? **How in the world are readers supposed to learn why you are any different than the next clinic with that "me too" strategy?**

Is it any wonder why consumers using the Yellow Pages tend to select an ad based on size, color, and clinic location? Is it any wonder why most physical therapists tell us they think investing in the Yellow Pages is a waste of money? To get this right, you need to understand the numbers, set up strict tracking procedures, and provide content that educates the reader on the important and relevant issues pertaining to choosing a physical therapy provider (see [www.PTreferralMachine.com/AdTips](http://www.PTreferralMachine.com/AdTips)).

**Until physical therapists begin applying strategic advertising principles more effectively, they will remain destined to underperform their market potential.** The advertisers that recognize the significance of this and how to effectively act on it will enjoy a strategic advantage that will pay big dividends, *guaranteed*.

<sup>1</sup>Yellow Pages Association Top 300 Headings 2006

*Looking for advice? Exclusively for readers of the MDT Business Corner, send any comments, questions, or marketing materials you would like professionally critiqued to [MDTbulletinTips@PTreferralMachine.com](mailto:MDTbulletinTips@PTreferralMachine.com). We hope you take advantage of this free service available to McKenzie members.*

**"Until physical therapists begin applying strategic advertising principles more effectively, they will remain destined to underperform their market potential." \***

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### Yellow Pages Facts:

- 9 out of 10 adults use the yellow pages annually - 14.6 billion references a year.
- 51% of adults use yellow page directories once a week.
- People take action —
  - 44% of references result in purchase.
  - 84% of references result in a contact by phone, in person or online.
- 44% are NEW customers.
- 61% referenced one or more ads.
- 4.6 is the average number of ads looked at.
- 2.1 is the average number of places contacted.

Source: Statistical Research Inc.,  
2005/Knowledge Networks Statistical Research

\*\*\*\*\*

*\* See ad concepts in a live 60 minute physical therapy marketing webinar while you eat a sandwich at your desk...*

Reserve your time slot at:  
[www.PTreferralMachine.com/webinar](http://www.PTreferralMachine.com/webinar)



**[www.mckenziemdt.org](http://www.mckenziemdt.org) —It's a whole new look!**

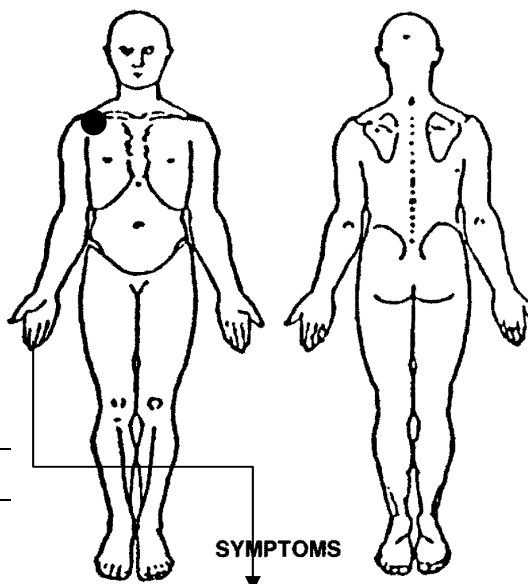
*With a great new feature started here in MDT Bulletin...*  
Research Reviews! A section devoted to current research reviewed by clinicians and how it is pertinent to MDT.

**...HAVE A VISIT  
TODAY!**



# THE MCKENZIE INSTITUTE EXTREMITIES ASSESSMENT

Date 4/18/07  
 Name \_\_\_\_\_ Sex M  F  
 Address \_\_\_\_\_  
 Telephone \_\_\_\_\_  
 Date of Birth \_\_\_\_\_ Age 57  
 Referral: GP / Orth / Self / Other  
 Work Telecommunications – on computer and phone all day-poor set up (being looked at)  
 Leisure \_\_\_\_\_  
 Postures / Stresses \_\_\_\_\_  
 Functional Disability from present episode Reaching forward eg. open door  
 Functional Disability score 45/75 Upper extremity functional score  
 VAS Score (0-10) 5/10



SYMPTOMS

Can get numb when tired - came on more recently → EMG clear

## HISTORY

Present Symptoms \_\_\_\_\_  
 Present since 6 months *Improving*  *Unchanging* *Worsening*  
 Commenced as a result of \_\_\_\_\_ *no apparent reason*  
 Symptoms at onset: \_\_\_\_\_  
 Constant symptoms: \_\_\_\_\_ Intermittent symptoms: \_\_\_\_\_  
 What produces or worsens Reaching fwd for phone, pulling open door, reaching up, end of day, writing

What stops or reduces At weekend. "Don't use it" and propped forward and up

Continued use makes the pain Better  Worse  No Effect  
 Pain at rest  Yes / No  
 Disturbed night ? Yes / No  
 Other Questions \_\_\_\_\_

Treatments this episode none  
 Previous episodes Wake up with shoulder pain 4yrs ago – resolved "eventually"  
 Previous treatments none  
 Spinal history Previous C/SP pain – been good recently

Paraesthesia  Yes / No

Medications tried \_\_\_\_\_ Effect See above

Present medication Thyroid, naproxen – when pain is bad

General health

Imaging x-ray "joint deterioration"

Summary: Acute / Sub-acute  *Chronic* *Trauma*  *Insidious onset*

Sites for physical examination \_\_\_\_\_

**EXAMINATION**

Observation \_\_\_\_\_

Baseline measurements (pain or functional activity) Post correction: NE Baseline: Shoulder Pain

Active Movements (note symptoms and range)	PDM	ERP
<b>ER no loss ↑sh</b> <b>HBB min loss ↑sh</b>		
<b>F no loss NE</b> <b>Horiz ADD no loss NE</b>		
<b>AB 145°(mod loss) ↑PDM</b> <b>E no loss NE</b>		
Passive Movement (+/- over pressure) (note symptoms and range): <b>ABD only ↑ERP – less pain then active</b>		
Resisted Test Response (pain)		
<b>ER min↑</b> <b>ABD NE</b>		
<b>IR NE</b>		

**Repeated Tests (choose the most symptomatic from above)**

Baseline symptoms	Symptoms response		Mechanical Response		
	During Movement – Produce, Abolish, Increase, Decrease, NE	After Movement – Better, Worse, NB, NW, NE	↑ROM	↓ROM	No Effect
<b>Active movement, passive movement, resisted test</b>					
<b>HBB</b>	<b>↑ PDM</b>				
<b>Rep HBB</b>	<b>↑ PDM</b>	<b>NW</b>			
<b>Rep HBB with OP</b>	<b>↑ PDM</b>	<b>B</b>	<b>✓ ABD</b>		
<b>Effect of static positioning</b>					
<b>Other tests: eg loaded, compression, unloaded etc.</b>					

**SPINE**

Movement Loss No loss NE

Effect of repeated movements \_\_\_\_\_

Effect of static positioning \_\_\_\_\_

Spine testing Not relevant / relevant / secondary problem \_\_\_\_\_

**PROVISIONAL CLASSIFICATION** Peripheral

**Spine**

Dysfunction – Articular \_\_\_\_\_

Contractile \_\_\_\_\_

Derangement \_\_\_\_\_

Postural \_\_\_\_\_

Other \_\_\_\_\_

Uncertain \_\_\_\_\_

**PRINCIPLE OF MANAGEMENT**

Education \_\_\_\_\_

Exercise Rep HBB with OP

Frequency

x 10/ 1-2 hrs

Treatment Goals Review in 24 hours