



# LBP Case Report: A Novel Approach

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## Massage Therapy is uniquely positioned to address pain, on many levels

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 Sensing. . .

<b>Exteroception</b>	—	What is happening around me?
<b>Proprioception</b>	—	Where am I in space?
<b>Interoception</b>	—	What is happening inside my body?

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 The Premise

When have you ever seen your own back?

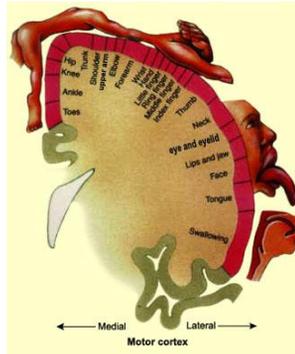
How many problems are there in the front of the body (that which we can easily see) relative to the back of the body, which we cannot see?



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## Touch Clarifies the Map



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## Changes in the Brain

- Perception and pain tolerance levels are significantly lower in patients with chronic back pain and episodic headaches
- These thresholds were lower the more chronic the pain had become
- Cortical changes may also play a role in these alterations of nociceptive sensitivity.

Flor, H. (2003). Cortical reorganisation and chronic pain: implications for rehabilitation. *Journal of Rehabilitation Medicine-Supplements*, 41(41), 66-72.

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## Expansion of Representation

- Data suggest that chronic pain leads to an expansion of the cortical representation zone
- The amount of expansion of the back region was positively correlated with chronicity, suggesting that this pain-related cortical reorganisation develops over time

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## Oswestry Low Back Pain Disability Questionnaire

This questionnaire focuses on the functional aspect of back pain.

This is more accurate and reflective of how pain affects one's life, rather than just the current presence of pain.

### Oswestry Disability Questionnaire

This questionnaire has been designed to give us information as to how your back or leg pain is affecting your ability to manage in everyday life. Please answer by checking **one box in each section** for the statement which best applies to you. We realise you may consider that two or more statements in any one section apply but please just shade out the spot that indicates the statement which **most clearly describes your problem**.

#### Section 1: Pain Intensity

- I have no pain at the moment  
 The pain is very mild at the moment  
 The pain is moderate at the moment  
 The pain is fairly severe at the moment  
 The pain is very severe at the moment  
 The pain is the worst imaginable at the moment

#### Section 2: Personal Care (eg. washing, dressing)

- I can look after myself normally without causing extra pain  
 I can look after myself normally but it causes extra pain  
 It is painful to look after myself and I am slow and careful  
 I need some help but can manage most of my personal care  
 I need help every day in most aspects of self-care  
 I do not get dressed, wash with difficulty and stay in bed

#### Section 3: Lifting

- I can lift heavy weights without extra pain  
 I can lift heavy weights but it gives me extra pain  
 Pain prevents me lifting heavy weights off the floor but I can manage if they are conveniently placed eg. on a table  
 Pain prevents me lifting heavy weights but I can manage light to medium weights if they are conveniently positioned  
 I can only lift very light weights  
 I cannot lift or carry anything

#### Section 4: Walking\*

- Pain does not prevent me walking any distance  
 Pain prevents me from walking more than 2 kilometres  
 Pain prevents me from walking more than 1 kilometre  
 Pain prevents me from walking more than 500 metres  
 I can only walk using a stick or crutches  
 I am in bed most of the time

#### Section 5: Sitting

- I can sit in any chair as long as I like  
 I can only sit in my favourite chair as long as I like  
 Pain prevents me sitting more than one hour  
 Pain prevents me from sitting more than 30 minutes  
 Pain prevents me from sitting more than 10 minutes  
 Pain prevents me from sitting at all

#### Section 6: Standing

- I can stand as long as I want without extra pain  
 I can stand as long as I want but it gives me extra pain  
 Pain prevents me from standing for more than 1 hour  
 Pain prevents me from standing for more than 30 minutes  
 Pain prevents me from standing for more than 10 minutes  
 Pain prevents me from standing at all

#### Section 7: Sleeping

- My sleep is never disturbed by pain  
 My sleep is occasionally disturbed by pain  
 Because of pain I have less than 6 hours sleep  
 Because of pain I have less than 4 hours sleep  
 Because of pain I have less than 2 hours sleep  
 Pain prevents me from sleeping at all

#### Section 8: Sex Life (if applicable)

- My sex life is normal and causes no extra pain  
 My sex life is normal but causes some extra pain  
 My sex life is nearly normal but is very painful  
 My sex life is severely restricted by pain  
 My sex life is nearly absent because of pain  
 Pain prevents any sex life at all

#### Section 9: Social Life

- My social life is normal and gives me no extra pain  
 My social life is normal but increases the degree of pain  
 Pain has no significant effect on my social life apart from limiting my more energetic interests e.g. sport  
 Pain has restricted my social life and I do not go out as often  
 Pain has restricted my social life to my home  
 I have no social life because of pain

#### Section 10: Travelling

- I can travel anywhere without pain  
 I can travel anywhere but it gives me extra pain  
 Pain is bad but I manage journeys over two hours  
 Pain restricts me to journeys of less than one hour  
 Pain restricts me to short necessary journeys under 30 minutes  
 Pain prevents me from travelling except to receive treatment

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## The Grid

There were 25 possible areas of touch discrimination.



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## Pressure Input



- Used a pressure algometer
- Three to four pounds of pressure
- Three seconds of pressure on each point

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## A Sample of the Key

After I pressed on one spot for 3 seconds, my subject would make his answer on an identical grid shown on my Samsung Tablet, using the stylus.



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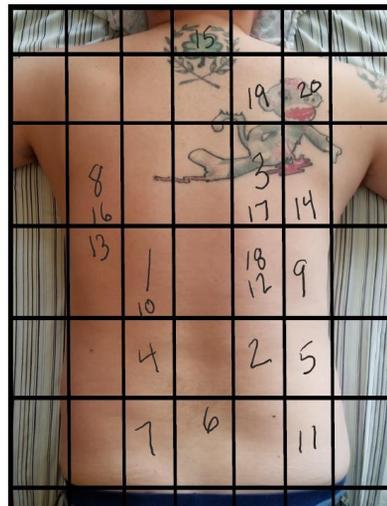
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## Completed Grid

While I did not score for this, I noticed after three training sessions, his “wrong” answers were often very close, just one grid away.

I could have introduced some “proximity” scoring as well.



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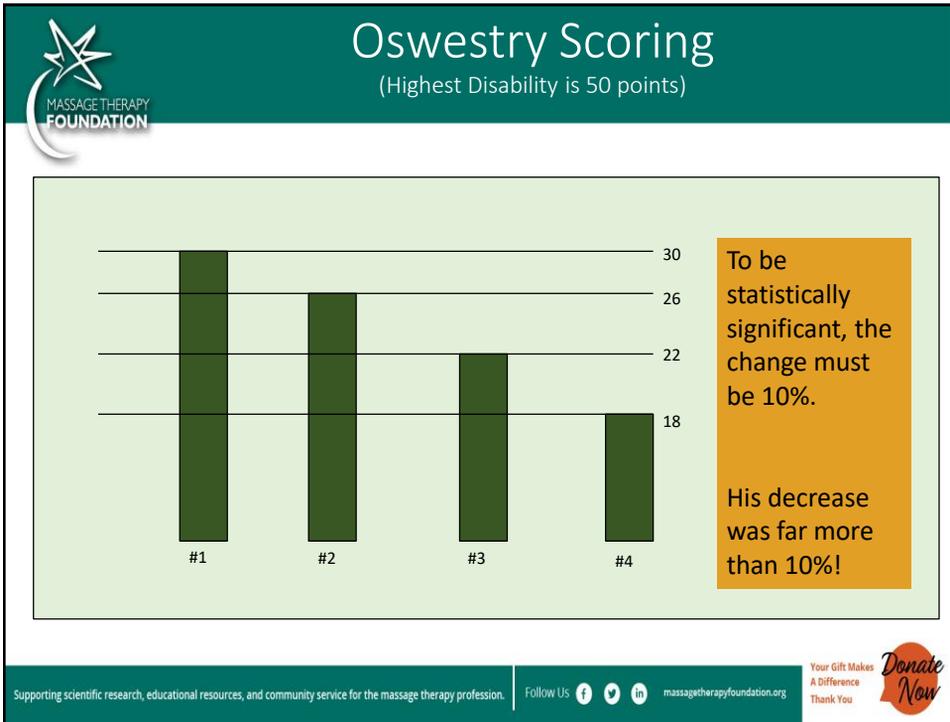
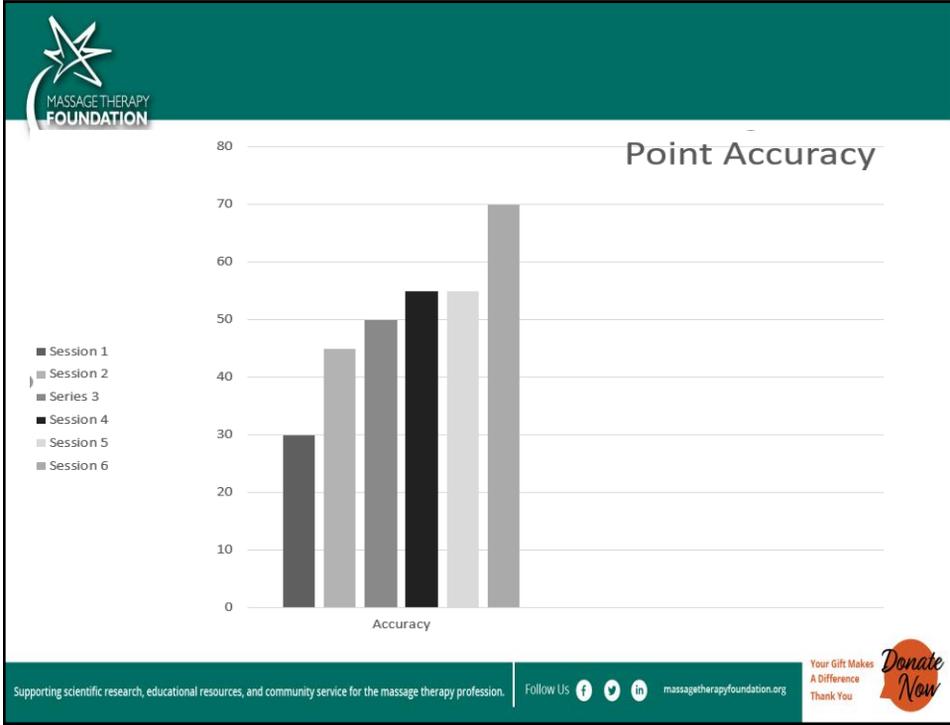
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# Almost Linear!



His accuracy increased from 30% to 70%  
His Oswestry score decreased from 30 to 18

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# Attention Must Be Paid



It matters where you  
put your focus. . .

Owl monkeys and finger  
stimulation

Spinal Manipulation under  
anesthesia

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## The Takeaway Lesson



If you don't know what  
you are doing, you don't  
have a choice.  
*Moshe Feldenkrais*

It is possible to use touch as both a  
“bottom up” and “top down” approach  
to the treatment of low back pain.

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