

LUMBAR SPINE: study #4

Ash, L. M., Modic, M. T., Obuchowski, N. A.,
Ross, J. S., Brant-Zawadzki, M. N., & Grooff, P.
N. (2008). Effects of Diagnostic Information,
Per Se, on Patient Outcomes in Acute
Radiculopathy and Low Back Pain. *American
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Background Information

- Doctors or even patients often request for scans such as x-rays, MRI's, CT's, etc
- There is a belief that knowing what is really wrong with the body through imaging would provide reassurance to patients

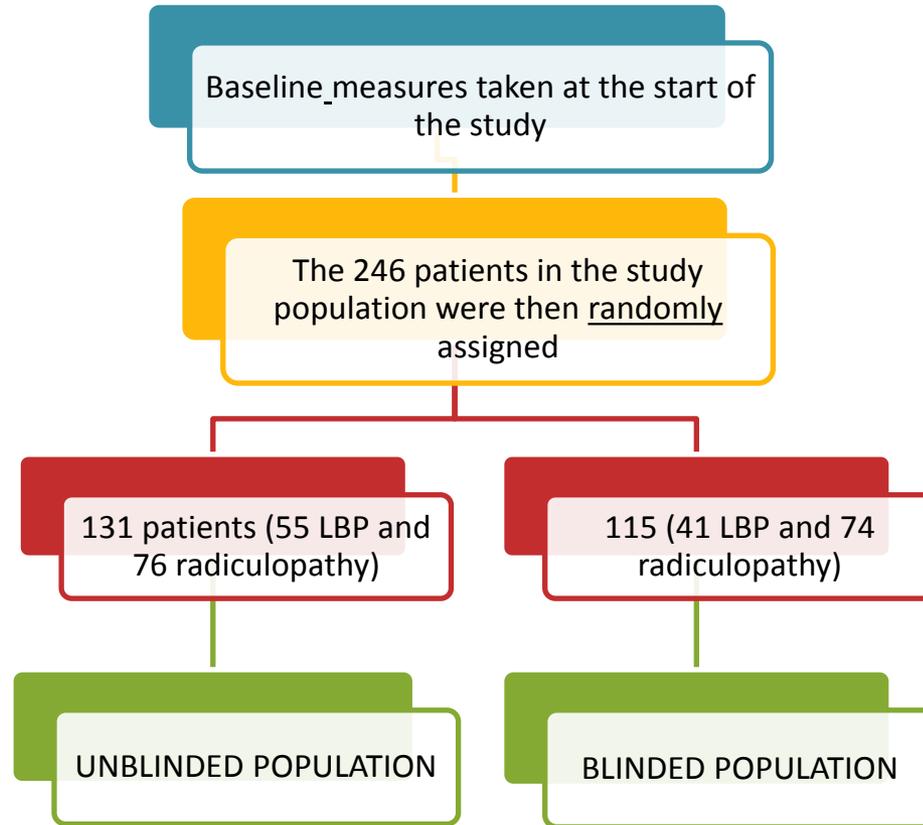


Purpose of this Study

- Investigate how MRI findings affects the prognosis of patients with low back pain (LBP) or radiculopathy
- Look at outcome measures of participants with and without knowledge of their MRI results

Study Design

- Sample 246 (104 ♂ 142 ♀)
- Mean age: 42 y.o.
- Subjects were randomly assigned to unblinded group (provided with MRI results within 48 hours) or blinded group (ie: both patients and physicians unaware of MRI results)



At baseline, there were no statistically significant differences in demographics, absenteeism, intensity of pain, or general health (GH) in the two groups

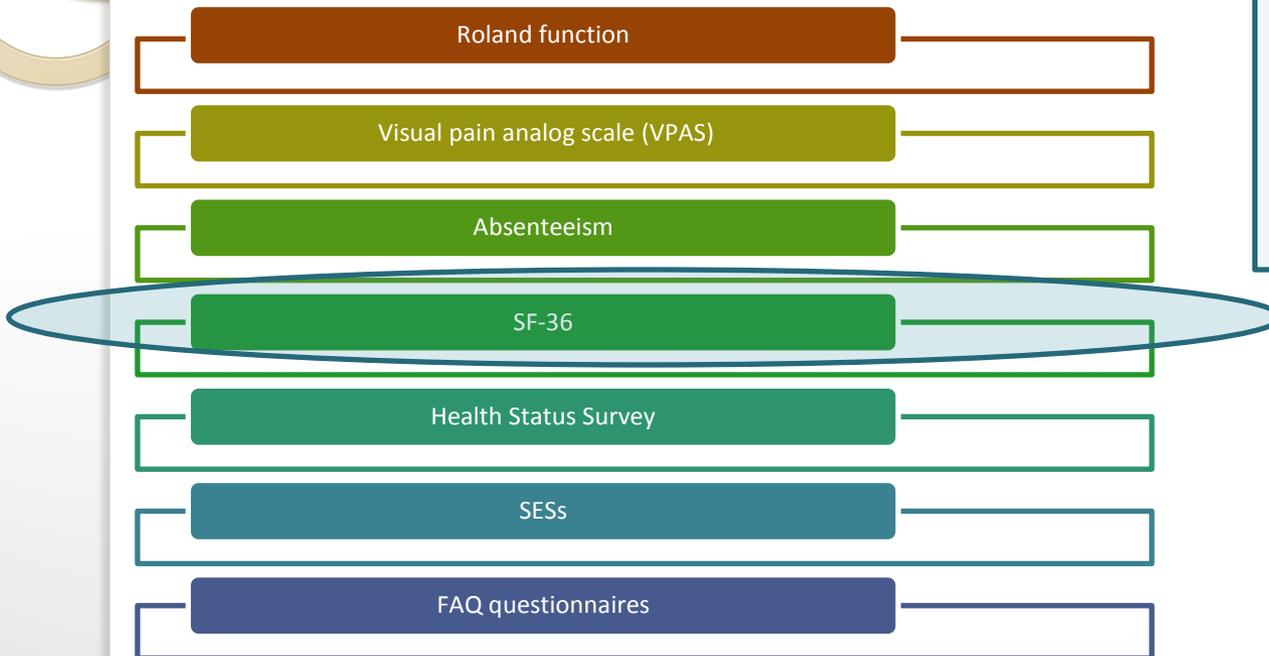


Study Design -Treatment Plan

- The therapeutic plan for each patient was determined even before the MRI's were performed
- The treatment focused on conservative management for both groups

Study Design – Outcome Measures

Outcome Measures that were taken for this study:



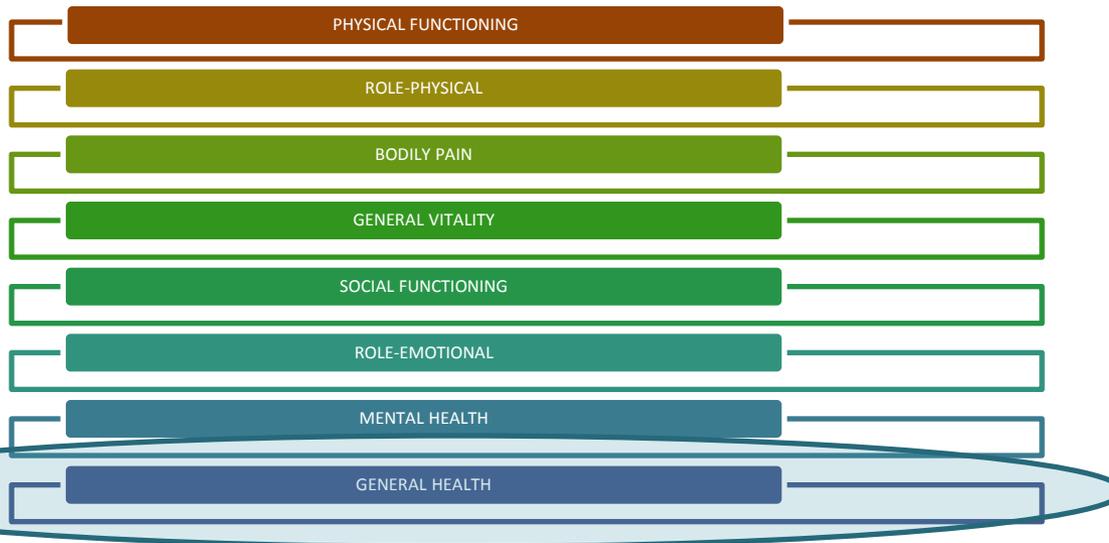
SF-36: Questionnaire used to measure the outcome of care provided, components on this questionnaire pertain to patient's quality of life

- Outcome measures were taken at 2, 4, 6, and 8 weeks; and 6, 12, and 24 months.

SF-36 Health Concepts

The SF-36 health survey is a self-assessment of 8 health concepts categorized into **physical and mental health components**. Most subscales fall either under physical or mental health components, whereas the general health subscale has correlations with both components.

The SF-36 Health Survey Is Subdivided Into 8 Subscales (Health Concepts):





Findings

- In this study, BLINDED and UNBLINDED patients showed no difference in primary outcomes
- Secondary outcomes were also similar, except on the General Health (GH) subscale of the SF-36.



Findings

- BLINDED patients in this study had more improvement in the mean General Health (GH) score at 2, 4, and 6 weeks
- However both BLINDED and UNBLINDED General Health (GH) scores decreased after 1 year, with the BLINDED score remaining higher than the UNBLINDED score



Conclusion

- The results imply that patients in the UNBLINDED group perceived their own health as being poor and had less sense of well-being
- Lower scores on this SF-36 subscales, as seen in the UNBLINDED group, suggests **poorer response to treatment meant to target both physical and mental health components**

Other Remarks

- Medical professionals prescribe MRI's for reassuring their patients and/or to see if a surgery is necessary
- However...
- Can MRI results really get patients better?
- Do patients know what to look for in a MRI's?
- Do they have any idea which structures on the MRI's are responsible for their pain?
- Do we, as healthcare professionals, have any idea what is clinically relevant to look for on MRI's?