



Sources of Patients' Expectations of Lumbar Surgery

Girardi FP, Duculan R, Fong A, Rigaud MC, Cammisa FP, Sama AA,
Hughes AP, Lebl DR, Mancuso CA

Background

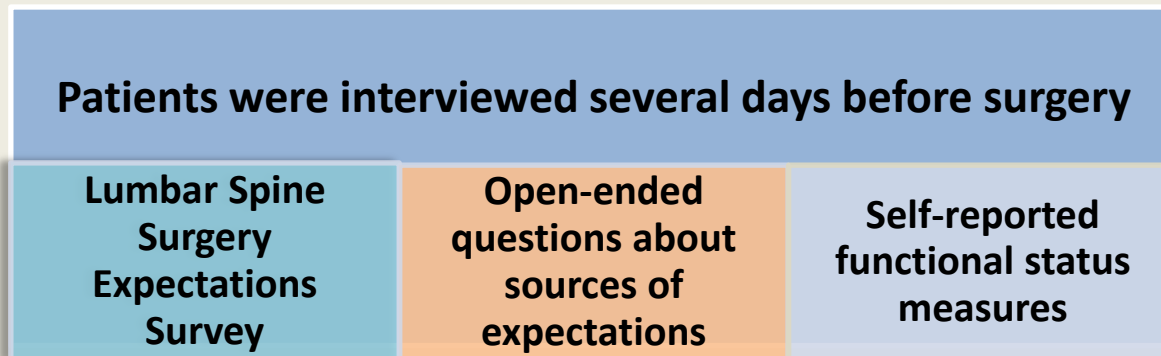
- Patients' expectations of lumbar surgery are essential in the decision of whether to proceed with surgery.
- Ensuring that expectations are appropriate should be an integral part of preoperative evaluations.
- It is likely that in addition to surgeons, patients actively seek or are passively influenced about expectations from additional sources, such as other healthcare providers, social network contacts, and the media.
- In order to foster appropriate expectations it is necessary to understand where patients obtain their expectations and whether sources of expectations are modifiable.

Objective

The objective of this study was to learn about patients' sources of expectations of lumbar surgery.

Methods

- Analysis based on enrollment data from a longitudinal study of outcomes of lumbar surgery.
- 428 consecutive patients from the practices of 5 spine surgeons participated.



Patients were interviewed several days before surgery

Lumbar Spine Surgery Expectations Survey

Self-reported functional status measures

Symptoms

Function

Psychological well-being

HOSPITAL FOR SPECIAL SURGERY
LUMBAR SPINE SURGERY EXPECTATIONS SURVEY

Please circle the number that best describes your response to each question.
How much improvement do you expect in the following areas as a result your spine surgery?

	Back to normal or complete improvement	Not back to normal, but...			I do not have this expectation, or this expectation does not apply to me
		a lot of improvement	a moderate amount of improvement	a little improvement	
Relieve pain	1	2	3	4	5
Relieve symptoms that interfere with sleep	1	2	3	4	5
Improve ability to walk more than several blocks	1	2	3	4	5
Improve ability to sit more than half an hour	1	2	3	4	5
Improve ability to stand more than half an hour	1	2	3	4	5
Regain strength in legs	1	2	3	4	5
Improve balance	1	2	3	4	5
Improve ability to go up and down stairs	1	2	3	4	5
Improve ability to manage personal care (such as, dress, bathe)	1	2	3	4	5
Improve ability to drive	1	2	3	4	5
Remove need for pain medications	1	2	3	4	5
Improve ability to interact with others (such as, social and family activities)	1	2	3	4	5
Improve sexual activity	1	2	3	4	5
Improve ability to perform daily activities (such as, chores, shopping, errands)	1	2	3	4	5
Improve ability to exercise for general health	1	2	3	4	5
Remove restrictions in activities (such as, be more mobile, not have to rest every few minutes)	1	2	3	4	5
If currently employed: Fulfill job responsibilities (such as, work required hours, complete expected tasks)	1	2	3	4	5
If currently work-disabled or unemployed due to spine: Go back to work for salaried employment	1	2	3	4	5
Reduce emotional stress or sad feelings	1	2	3	4	5
Stop my spine condition from getting worse	1	2	3	4	5
Remove the control my spine condition has on my life	1	2	3	4	5

© 2010 Hospital for Special Surgery. All rights reserved.

Oswestry Disability Index

APPROVAL **Oswestry Disability Index** Form 0002, 2009

Patient Name _____ Date _____ Chart _____

Visit Type
 Drop 6 week 3 month 6 month 12 month 18 month 24 month Other (Specify) _____

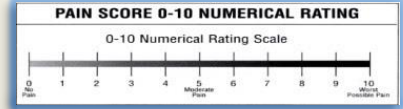
OSWESTRY LOW BACK PAIN DISABILITY INDEX

Please Read: This questionnaire is designed to enable us to understand how much your low back has affected your ability to manage everyday activities. Please answer each item by circling the ONE CHOICE that most applies to you. We realize that you may feel that more than one statement may relate to you, but please just check the one choice which most closely describes your situation right now.

<p>1. Pain Intensity (select one)</p> <p>A. The pain comes and goes and is very mild.</p> <p>B. The pain does not vary much and is mild.</p> <p>C. The pain comes and goes and is moderate.</p> <p>D. The pain does not vary much and is moderate.</p> <p>E. The pain comes and goes and is severe.</p> <p>F. The pain does not vary much and is severe.</p>	<p>4. Walking (select one)</p> <p>A. Pain does not prevent me from walking any distance.</p> <p>B. Pain prevents me from walking more than 1 mile.</p> <p>C. Pain prevents me from walking more than 1/2 mile.</p> <p>D. Pain prevents me from walking more than 1/4 mile.</p> <p>E. I can only walk using a cane or crutches.</p> <p>F. I am in bed most of the time and have to crawl to the toilet.</p>
<p>2. Personal Care (select one)</p> <p>A. I do not have to change my way of washing or dressing in order to avoid pain.</p> <p>B. I do not normally change my way of washing or dressing even though it causes some pain.</p> <p>C. Washing and dressing increase the pain, but I manage not to change my way of doing it.</p> <p>D. Washing and dressing increases the pain and I find it necessary to change my way of doing it.</p> <p>E. Because of the pain, I am unable to do some washing and dressing without help.</p> <p>F. Because of the pain, I am unable to do any washing or dressing without help.</p>	<p>5. Sitting (select one)</p> <p>A. I can sit in any chair as long as I like without pain.</p> <p>B. I can sit only in my favorite chair as long as I like.</p> <p>C. Pain prevents me from sitting more than 1 hour.</p> <p>D. Pain prevents me from sitting more than 1/2 hour.</p> <p>E. Pain prevents me from sitting more than 10 minutes.</p> <p>F. Pain prevents me from sitting at all.</p>

A. Standline (select one)

Numerical Pain Rating



Geriatric Depression Scale

APPROVAL **Mood Scale**

Please circle the best answer for how you felt over the past week.

1. Are you basically satisfied with your life?	yes / no
2. Have you dropped many of your activities and interests?	yes / no
3. Do you feel that your life is empty?	yes / no
4. Do you often get bored?	yes / no
5. Are you hopeful about the future?	yes / no
6. Are you bothered by thoughts you can't get out of your head?	yes / no
7. Are you in good spirits most of the time?	yes / no
8. Are you afraid that something bad is going to happen to you?	yes / no
9. Do you feel happy most of the time?	yes / no
10. Do you often feel helpless?	yes / no

Patients were interviewed several days before surgery

**Open-ended
questions about
sources of
expectations**

“How did you come to have these expectations”

“How did you come to know these are potential results of surgery?”



Response were written down verbatim.

Data analysis

Qualitative

- Qualitative analysis to identify sources
- Number and frequency of sources per patient calculated

Bivariate

- Bivariate comparisons between sources and demographics, clinical characteristics, and Expectations Survey items

Multivariable

- Multivariable analyses with sources as dependent variables and demographics and clinical characteristics as independent variables

Results (N=428)

Demographics and clinical characteristics	
Age, years, mean (range)	55 (18-85)
Men	54%
Employed	50%
Positive screen for depression	31%
Received physical therapy	79%
Had chiropractic care	47%
Degenerative spine diagnosis	80%
Had prior spine surgery	24%
ODI score, mean (range)	53 (4-84)
Back pain, mean (range)	6 (0-10)

Results: from open-ended questions

Sources of expectations of lumbar surgery	
Current surgeon	83%
Internet resources	55%
Social network contacts	26%
Other physicians	22%
Own prior experiences with surgery *	65%
* for 103 patients who had prior lumbar surgery	

Median number of sources 3 (range 1-9)
Internet was the only modifiable non-surgeon source

Quotations from patients exemplifying sources

Sources of expectations of lumbar surgery	
Current surgeon	<i>"Dr. xx and I discussed what my expectations should be...Now I'm expecting 80-100% improvement. He said it should certainly help but we never got around to really talk specifics."</i>
Internet resources	<i>"From my research on the internet I learned that surgery is the only way to fix the problem, I expect addressing the problem preemptively will prevent future problems and give complete improvement."</i>
Social network contacts	<i>"My close friend had this surgery, she had only one disc fused; I'm having two, so it might be worse."</i>
Other physicians	<i>"I have had only a few conversations with my surgeon because I have already spoken so much with my other doctors."</i>
Own prior experience with lumbar surgery	<i>"I had spine surgery 16 years ago; my expectations are based on those results."</i>

Results: multivariable analyses

Patients cited more sources if they were...	OR	CI	P
<i>employed</i>	1.6	1.1-2.3	.007
<i>had worse ODI scores</i>	1.5	1.0-2.0	.04
<i>had physical therapy</i>	2.2	1.5-3.4	.0003
<i>had chiropractic care</i>	1.6	1.2-2.3	.005

Patients were more likely to cite the internet if they were...	OR	CI	P
<i>younger</i>	1.6	1.1-2.4	.02
<i>employed</i>	2.2	1.5-3.3	<.0001
<i>had physical therapy</i>	1.9	1.2-3.1	.0006
<i>did not have positive screen for depression</i>	1.8	1.2-2.8	.004

Conclusions

Patients derive their expectations of lumbar surgery from multiple sources.

Aside from expectations obtained from surgeons, most patients cited the internet as their major source of expectations.

Expectations should be addressed through enhanced communication with surgeons.

Internet resources are widely used and should be developed with accurate information to reinforce surgeons' advice.

Disclosure

None of the authors has any potential conflict of interest