

Low Back Pain Rating Scale of Manniche et al.

Overview:

Manniche et al developed rating scale to evaluate patients with low back pain. The scale covers the 4 manifest components of back pain and was designed for monitoring outcome following therapeutic interventions. The authors are from several hospitals in Denmark.

Measures in rating scale:

- (1) back and leg pain (60 points)
- (2) disability index (30 points)
- (3) physical impairment (40 points)

Back and Leg Pain

Visual analogue scales (VAS) ranging from 0 (no pain) to 10 (worst imaginable pain):

- (1) back pain at the time of the examination
- (2) leg pain at the time of the examination
- (3) the worst back pain within the last 2 weeks
- (4) the worst leg pain within the last 2 weeks
- (5) average level of back pain during the last 2 weeks
- (6) average level of leg pain during the past 2 weeks

pain index =

= SUM(points for all 6 visual analogue scales)

Disability Index

Questions (Table 1 page 319)

- (1) Can you sleep at night without low back pain interfering?
- (2) Can you do your daily work without low back pain reducing your activities?
- (3) Can you do the easy chores at home such as watering flowers or cleaning the table?
- (4) Can you put on shoes and stockings by yourself?
- (5) Can you carry two full shopping bags (10 kilograms total)?
- (6) Can you get up from a low armchair without difficulty?
- (7) Can you bend over the wash basin to brush your teeth?
- (8) Can you climb stairs from one floor to another without resting because of low back pain?

(9) Can you walk 400 meters without

Measure	Finding	Points
back muscle endurance	>= 270 seconds	0
	240 – 269 seconds	1
	210 – 239 seconds	2
	180 – 209 seconds	3
	150 – 179 seconds	4
	120 – 149 seconds	5
	90 – 119 seconds	6
	60 – 89 seconds	7
	30 – 59 seconds	8
	1 – 29 seconds	9
	0 seconds	10
back mobility (modified Schober's test)	>= 60 mm	0
	50 – 59 mm	2
	40 – 49 mm	4
	30 – 39 mm	6
	20 – 29 mm	8
	0 – 19 mm	10
overall mobility test	< 10 seconds	0
	10 – 19 seconds	2
	20 – 29 seconds	4
	30 – 39 seconds	6
	40 – 49 seconds	8
	>= 50 seconds	10
analgesic use	none during past week	0
	use NSAID or non-narcotic analgesic 1-4 times a week	2
	use of NSAID or non-narcotic analgesic 5+ times a week	4

	use of morphine or analogues 1-4 times a week	8
	use of morphine or analogues 5+ times a week	10

impairment index = SUM(points for all 4 measures)

Interpretation:

- minimum score for subscores and total: 0
- maximum pain index: 60
- maximum disability index: 30
- maximum physical impairment: 40
- maximum total points: 130
- The higher the score the greater the level of disability and impairment.

Performance:

- The scale was found to be reliable based on comparisons with the Global Assessments reported by an experienced clinician and the patient.
- Inter-rater agreement is high.

References:

Calin A. Chapter 5.5.5: Ankylosing spondylitis pages 1058-1070 (page 1065). IN: Maddison PJ Isenberg DA et al (editors). Oxford Textbook of Rheumatology Second Edition. Oxford Medical Publications. 1998.

Manniche C Asmussen K et al. Low back pain rating scale: Validation of a tool for assessment of low back pain. Pain. 1994; 57: 317-326.