The Low-Back Outcome Scale of Greenough and Fraser

Overview:

Greenough and Fraser developed the Back Outcome Score (LBOS) scale for measuring functional outcome in a patient with low back pain. The authors are from Middleborough General Hospital in England and Royal Adelaide Hospital in Australia.

Parameters:

(1) current pain from a 10 cm (or 100 mm) visual analogue scale (VAS)

- (2) employment
- (3) domestic chores or "odd jobs"
- (4) sport or active social activities (like dancing)
- (5) resting

(6) treatment or consultation with health care provider

- (7) analgesia
- (8) sex life
- (9) sleeping
- (10) walking
- (11) sitting
- (12) traveling
- (13) dressing

Parameter	Finding	Points
current pain	7 to 10 cm VAS	0
	5 to 6 cm VAS	3
	3 to 4 cm VAS	6
	0 to 2	9
employment	unemployed because of back pain	0
	part time	3
	full time lighter	6
	full time original	9
domestic chores or odd jobs	none	0
	a few but not many	3
	most or all but more slowly	6
	normally	9
sport or active social activities	none	0
	some but much less than before	3
	back to previous level	9
resting	resting more than half the day	0

	little rest needed occasional	4
	no need to rest	6
treatment or consultation	more than once per month	0
	about once per month	2
	rarely	4
	never	6
analgesia	several times each day	0
	almost every day	2
	occasionally	4
	never	6
sex life	severely affected impossible	0
	moderately affected difficult	2
	mildly affected	4
	unaffected	6
sleeping	severely affected impossible	0
	moderately affected difficult	1
	mildly affected	2
	unaffected	3
walking	severely affected impossible	0
	moderately affected difficult	1
	mildly affected	2
	unaffected	3
Sitting	severely affected impossible	0
	moderately affected difficult	1
	mildly affected	2
	unaffected	3
Travelling	severely affected impossible	0
	moderately affected difficult	1

	mildly affected	2
	unaffected	3
Dressing	severely affected impossible	0
	moderately affected difficult	1
	mildly affected	2
	unaffected	3

• The pain scale is a linear scale from 0 to 10 cm with 0 = no pain and 10 = worst possible pain imaginable.

• The VAS score appears to have gaps (at 2-3 4 and 6-7 cm).

• For employment status housewives are according to previous abilities.

total score = SUM(points for all 13 parameters)

Interpretation: • minimum score: 0

• maximum score: 75

• The higher the score the better the patient's status.

Score	Status
>= 65	excellent
50 - 64	good
30 - 49	fair
0 – 29	poor

References:

Greenough CG Fraser RD. Assessment of outcome in patients with low-back pain. Spine. 1992; 17: 36-41 (Table 1 page 37).

Greenough CG. Results of treatment of lumbar spine disorders. Acta Orthop Scand. 1993; Supplement 251: 126-129.

Woertgen C Holzschuh M et al. Does the choice of outcome scale influence prognostic factors for lumbar disc surgery? Eur Spine J. 1997; 6: 173-180.

Woertgen C Gliese M et al. Short term prognostic factors in lumbar disc surgery: The low back prognostic score is of predictive value. Zentralbl Neurochir. 1998; 30: 4-13.