Patient perspective vs expert opinion: Optimal rehabilitation practices for management of single- and double level lumbar fusion surgery

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Summary

Extensive variation and uncertainty in rehabilitation of lumbar fusion **calls for consensus on the best rehabilitation pathway**

In this modified Delphi study, **expert consensus** on best practices in the rehabilitation of single- and double level lumbar fusion surgery for degenerative conditions was achieved and **validated by patients**

Study design

Multidisciplinary expert panel

31 Belgian and Dutch experts, clinical and/or academic:

- 5 Neurosurgeons
- 5 Orthopaedic surgeons
- 8 Physiotherapists
- 5 Psychologists
- 2 Nurses
- 1 Physician assistant
- 1 General practicioner
- 1 Clinical epidemiologist
- 3 Physical and Rehabilitation Medicine specialists

4-round modified Delphi study

3 online rounds (anonymous, iterative, feedback on group scoring), followed by **1** in-person focus group

- Response rates (round 1-2-3-4): 100%-87%-87%-55%
- Followed the CREDES guidelines,
- Cut-off consensus: **75%**

Validation

9 patients that underwent lumbar fusion validated the expert consensus by expressing their experiences:

- Scoping survey, followed by
- Focus group

Expert-consensus on **optimal rehabilitation practices** for single- and double-level lumbar fusion: 122 statements

Therapeutic alliance

- Shared-decision for lumbar fusion surgery
- Uniform communication
- Interdisciplinary discussion
- Guidance by case manager

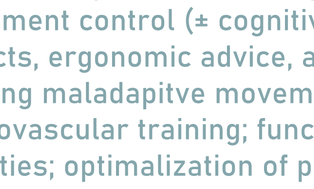
Preoperative phase

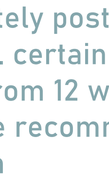
Promoting healthy lifestyle

Physical activity
Smoking cessation
Weight reduction (BMI<30)

Individual physiotherapy & information in group

(+multidisciplinary therapy on indication)
Education (including pain education)
Teaching postoperative transfers
Patient-specific ergonomic advice
Encourage physical activity





Hospitalisation phase

Discharge criteria

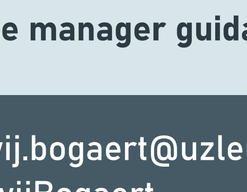
Controlable pain
Clean wound
Basic ADL
Stairs if necessary in home situation

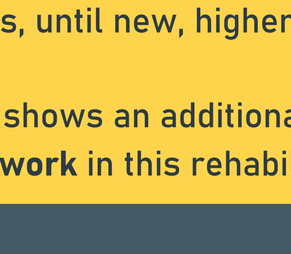
Early mobilisation, daily physiotherapy

(+multidisciplinary therapy on indication)
Education (including pain education)
Functional movements (standing, transfers, gait rehabilitation, climbing stairs)
Patient-specific advices for at home
Encourage physical activity

Lumbar fusion surgery

To be sheduled at the beginning of the week if no weekend therapy is available





Postoperative phase

Follow-up

Follow-up by general practitioner
One control consultation with the treating surgeon
Good extramural communication

Referral to skilled physiotherapist

based on team assesment (+multidisciplinary therapy on indication)
Education; optimalization of posture and movement control (± cognitive behavioral aspects, ergonomic advice, analyzing and treating maladapitve movement patterns); cardiovascular training; functional training of activities; optimalization of participation

Which musculoskeletal loading of the vertebral column is allowed?

- Low to moderate (e.g. walking, cycling, light household tasks, picking up something): immediately postoperatively
- High (e.g. certain sporting activities, heavy lifting): from 12 weeks onwards on the basis of a favorable recommendation by the treating physician
- Postoperative bracing should not be prescribed

Patients' perspective on this expert-consensus?

⚠ highlighted a need for early **guidance in return-to-work**
✓ agreed on the beneficial effect of **uniform communication**, and on
✓ **case manager guidance**

Clinical implications?

- These consensus statements may act as a **much-needed guidance** for clinicians, until new, higher level of evidence become available.
- Patients' perspective shows an additional *need* for early **support in return-to-work** in this rehabilitation pathway.

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