

# DISCAL PROSTHESIS

# PHYSIOTHERAPY



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## **INFORMATION CONCERNING PHYSIOTHERAPY**

- 5 sessions a week ; 2 with a physiotherapist.**
- Each movement must be repeated 10 times.**
- Do the exercises in order, without rushing things, even if everything is going fine .**
- The list of exercises is not exhaustive.**
- If certain exercises are too painful leave them for a few weeks or until the following phase.**
- Complete limbering up and muscle development sessions with pain-relieving and relaxing techniques on the lumbar region (heat ,massage...).**
- Always keep a correct posture so as to avoid putting pressure on the prosthesis.**

# **SOME EXAMPLES OF GOOD POSITIONS (TO PROTECT THE SPINE IN GENERAL).**

## **Standing up**



# **WHAT IS NOT ALLOWED**

**-NO ROTATION OF THE LUMBAR REGION FOR 3 WEEKS FOLLOWING THE OPERATION.**

**-DON'T CURVE THE LUMBAR REGION FOR 6 WEEKS.**

**-NO INTENSIVE STOMACH MUSCLE EXERCISES FOR 6 WEEKS.**

**-APART FROM PHYSIOTHERAPY, DON'T UNDERTAKE ANY SPORTS FOR 3 MONTHS.**

**-AVOID STRETCHING THE SCIATIC NERVE IF IT IS PAINFUL.**

# 0 → 3 WEEKS

## **Limbering Up**

### LEANING

#### SITTING



**Start**



**Bend forward**

#### LYING



**Start**



**Bring knees up to chest**

#### STANDING



# BENDING

## SITTING



**Start**



**Lean to the right**



**Start**



**Lean to the left**

## STANDING



**Start**



**Lean to the left**



**Start**



**Lean to the right**

## **DEVELOPING MUSCLES**

### ABDOMINAL MUSCLES

#### LYING



**Start : Breathe in through nose while swelling the stomach.**



**Breathe out while pulling stomach in . Place pelvis and lumbar region flat against the table. Keep abdominal muscles tense as much as you can.**



**Start : Lying on back**



**Breathe in through nose while swelling stomach. Breath out while pulling stomach**

in and bring knee to chest .  
Breathe in without moving leg .  
Breathe out while putting leg down.

## BACK MUSCLES

### LYING



Lying on back, palms facing down.  
Breathe in while swelling stomach.  
Breathe out, stomach in, while pressing lumbar region, hands and head flat against the table (6 secs).

### STANDING



Start :Against wall, feet apart,  
lumbar region flat.To hold the position,  
keep stomach in and tighten buttocks.



Breathe in while raising one  
arm and breathe out when  
lowering it . Change arms.



**Start :Against wall, feet apart, lumbar region flat. To hold the position, keep stomach in and tighten buttocks.**

**Breathe in while raising both arms and breath out when lowering them.**

**Do the same exercises away from the wall**

## **LEG MUSCLES**

### **STANDING**



**Start :Against wall, feet apart, lumbar region flat, stomach in to keep the position.**



**While letting the back slide against the wall,bend legs. Keep the position for a few seconds and come up again.**



**Start : Lumbar region against the wall, stomach in, one foot in front, one behind.**



**While letting the back slide against the wall,bend legs. Keep the position for a few seconds and come up again. Change legs.**



**Do the same exercises away from the wall**

# 3 WEEKS → 6 WEEKS

CONTINUE THE EXERCISES FROM PHASE ONE AND ADD THE FOLLOWING.

## **Limbering up**

### LEANING

#### ON HANDS AND KNEES



Start



Arch your back, like a cat (6 secs).

### BENDING

#### ON HANDS AND KNEES



Start



With forearms on the ground, move to the left (keep pelvis still).



Start



With forearms on the ground, move to the right (keep pelvis still).

# ROTATING

## SITTING



**Start**



**Turn to the left .**



**Start**



**Turn to the right.**

## STANDING



**Start**



**Turn to the left.**



**Start**



**Turn to the right.**

**ON HANDS AND KNEES**



**Start**



**Turn to the right.**



**Start**



**Turn to the left.**

## LYING



Start



Feet on the table, legs together  
move knees to the left and to the  
right.

## **DEVELOPING MUSCLES**

### ABDOMINAL MUSCLES

## LYING



Start : Breathe in with stomach out.



Breathe out while pulling stomach  
in and at the same time press the  
knee with the palm of your hand.  
(Wait 6 weeks before exerting  
maximum pressure).



Start : Breathe in with stomach out.



Breathe out while pulling stomach  
in and at the same time press the  
knee with the palm of your hand.

(Wait 6 weeks before exerting maximum pressure).

## BACK MUSCLES

### STANDING



**Start :Against wall, feet apart, lumbar region flat. To hold the position, keep stomach in and tighten buttocks. Weights in hands.**



**Breathe in while raising one arm and breathe out when lowering it.**



**Start :Against wall, feet apart, lumbar region flat. To hold the position, keep stomach in and tighten buttocks. Weights in hands.**



**Breathe in while raising both arms and breathe out when lowering them.**

**Do the same exercises away from the wall.**

# 6 WEEKS → 3 MONTHS

CONTINUE THE EXERCISES FROM PHASES ONE AND TWO AND ADD THE FOLLOWING.

## Limbering Up

### LEANING

#### SITTING



Start



Touch your heel (L5-S1).



Start



Touch your toes (L4-L5).

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F  
N  
O  
S  
C  
I  
A  
T  
I  
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A

## DEVELOPING MUSCLES

### ABDOMINAL MUSCLES

#### LYING



Breathe in with stomach out



Breathe out while pulling stomach in and at the same time lift heels and position hip, knee and ankle at



**Breathe in with stomach out**

**90°.Hold ten secs.**



**Breathe out while pulling stomach in and at the same time lift heels and position hip, knee and ankle at 90°, push knees with both hands and hold ten secs.**



**Breathe in with stomach out**



**Breathe out while pulling stomach in, lift head and elbows off table and hold ten secs . Keep lumbar region flat against table.**



**Breathe in with stomach out**



**Breathe out while pulling stomach in. With a slight rotation, lift head and elbows off table and hold ten secs . Keep lumbar region flat against table.**



**Breathe in with stomach out**



**Breathe in with stomach out**



**Breathe in with stomach out**

**SITTING**



**I  
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**Breathe out while pulling stomach in.  
Bring legs up to make a 90° angle.  
Hold ten secs.**



**Breathe out while pulling stomach in.  
Bring legs up to make a 90° angle.  
Move legs forwards and backwards  
ten times then rest.**



**Breathe out while pulling stomach in.  
Bring legs up to make a 90° angle.  
Move legs like scissors ten times then  
rest.**

Sitting on table edge, throw and catch a medicine ball(ten times).

## BACK MUSCLES

### LYING



Start : Lying on back, cushion under abdomen.



Lift up chest and arms, hold ten secs.  
(Don't curve lumbar region too much)