

eGUIDE for Patients

BACK PAIN :

Relief

USING THESE

EXERCISES



By Orthopaedic Specialist : Dr.Santosh Kumar

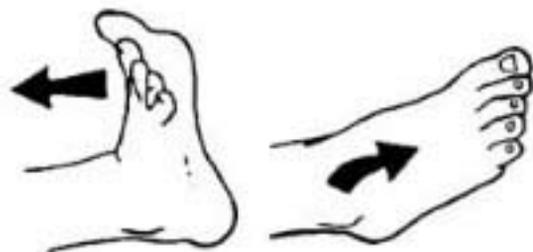
Healthcare Pioneer of East India - The Times Of India

Exercises For Back Pain

Regular exercises to restore the strength of your back and a gradual return to everyday activities are important for your full recovery. Your orthopaedic surgeon and physical therapist may recommend that you exercise 10 to 30 minutes a day 1 to 3 times a day during your early recovery. They may suggest some of the following exercises. This guide can help you better understand your exercise and activity program, which should be supervised by your therapist and orthopaedic surgeon.

Initial Exercise Program

Ankle Pumps



Lie on your back.

Move ankles up and down.

Repeat 10 times.



Exercises For Back Pain

Initial Exercise Program

Heel Slides

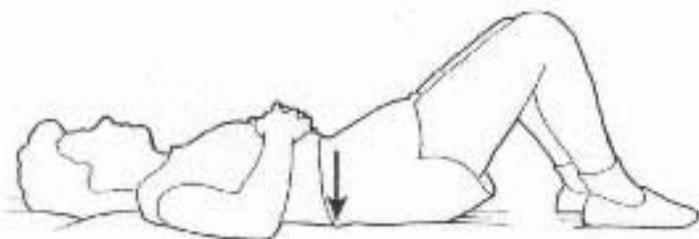


Lie on your back.

Slowly bend and straighten knee.

Repeat 10 times.

Abdominal Contraction



Lie on your back with knees bent and hands resting below ribs.

Tighten abdominal muscles to squeeze ribs down toward back.

Be sure not to hold breath. Hold 5 seconds.

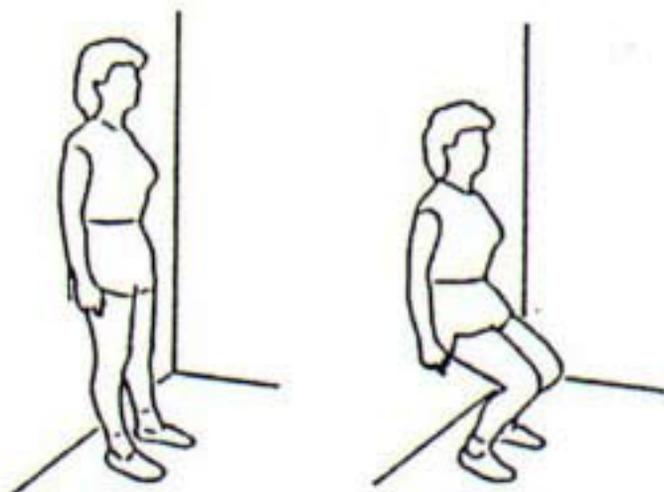
Relax. Repeat 10 times



Exercises For Back Pain

Initial Exercise Program

Wall Squats



Stand with back leaning against wall.

Walk feet 12 inches in front of body.

Keep abdominal muscles tight while slowly bending both knees 45 degrees.

Hold 5 seconds.

Slowly return to upright position.

Repeat 10 times.

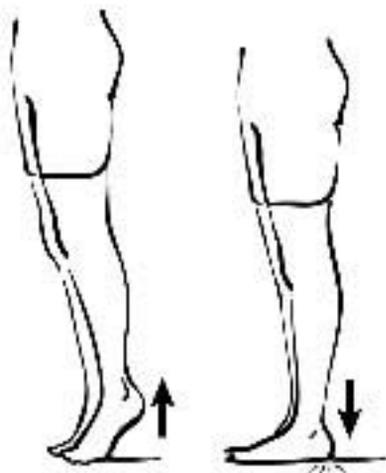


Exercises For Back Pain

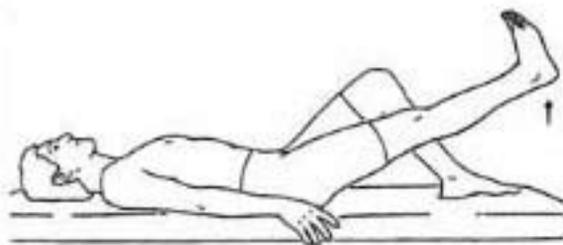
Initial Exercise Program

Heel Raises

Stand with weight even on both feet.
Slowly raise heels up and down.
Repeat 10 times.



Straight Leg Raises



Lie on your back with one leg straight and one knee bent.
Tighten abdominal muscles to stabilize low back.
Slowly lift leg straight up about 6 to 12 inches and hold 1 to 5 seconds. Lower leg slowly.
Repeat 10 times.



Exercises For Back Pain

Intermediate Exercise Program

Single Knee to Chest Stretch



Lie on your back with both knees bent.
Hold thigh behind knee and bring one knee up to chest.
Hold 20 seconds. Relax. Repeat 5 times on each side.

Hamstring Stretch



Lie on your back with legs bent. Hold one thigh behind knee.
Slowly straighten knee until a stretch is felt in back of thigh.
Hold 20 seconds. Relax. Repeat 5 times on each side.



Exercises For Back Pain

Intermediate Exercise Program

Lumbar Stabilization Exercises With Swiss Ball

Abdominal muscles must remain contracted during each exercise (see Abdominal Contraction). Perform each exercise for 60 seconds. The farther the ball is from your body, the harder the exercise.

Lying on Floor



Lie on your back with knees bent and calves resting on ball. Slowly raise arm over head and lower arm, alternating right and left sides.

Slowly straighten one knee and relax, alternating right and left sides.

Slowly straighten one knee and raise opposite arm over head. Alternate opposite arms and legs.

Slowly "walk" ball forward and backward with legs.



Exercises For Back Pain

Intermediate Exercise Program

Lumbar Stabilization Exercises With Swiss Ball

Sitting on Ball



Sit on ball with hips and knees bent 90° and feet resting on floor. Slowly raise arm over head and lower arm, alternating right and left sides.

Slowly raise and lower heel, alternating right and left sides.

Slowly raise one heel and raise opposite arm over head. Alternate opposite arm and heel.

Marching: Slowly raise one foot 2 inches from floor, alternating right and left side

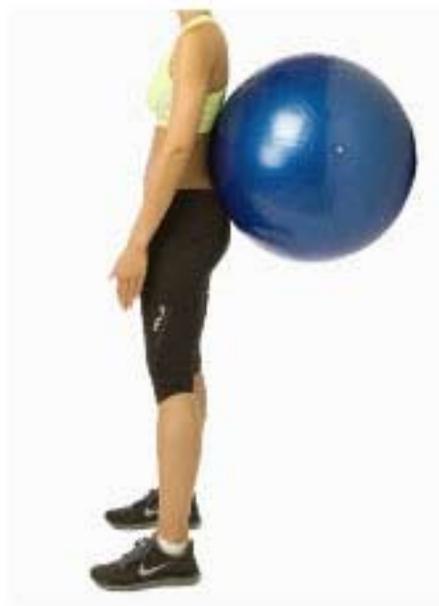


Exercises For Back Pain

Intermediate Exercise Program

Lumbar Stabilization Exercises With Swiss Ball

Standing



Stand with ball between your low back and wall.

Slowly bend knees 45° to 90° . Hold 5 seconds. Straighten knees.

Slowly bend knees 45° to 90° while raising both arms over head.



Exercises For Back Pain

Intermediate Exercise Program

Lumbar Stabilization Exercises With Swiss Ball

Lying on Ball



Lie on your stomach over ball.

Slowly raise alternate arms over head.

Slowly raise alternate legs 2 to 4 inches from floor.

Combine 1 and 2, alternating opposite arms and legs.

Bend one knee. Slowly lift this leg up, alternating right and left legs.

NOTE: Be careful not to arch your low back!



Exercises For Back Pain

Advanced Exercise Program

Hip Flexor Stretch



Lie on your back near edge of bed, holding knees to chest.

Slowly lower one leg down, keeping knee bent, until a stretch is felt across top of the hip/thigh.

Hold 20 seconds.

Relax.

Repeat 5 times on each side.



Exercises For Back Pain

Advanced Exercise Program

Piriformis Stretch



Lie on back with both knees bent.

Cross one leg on top of the other.

Pull opposite knee to chest until a stretch is felt in the buttock/hip area.

Hold 20 seconds.

Relax.

Repeat 5 times each side.



Exercises For Back Pain

Advanced Exercise Program

Lumbar Stabilization Exercise With Swiss Ball



Lie on stomach over ball.

" Walk " hands out in front of ball until ball is under legs. Reverse to starting position.

" Walk " hands out in front of ball until ball is under legs and slowly raise alternating arms over head.

" Walk " hands out in front of ball and slowly perform push-ups.



Exercises For Back Pain

Aerobic Exercises

Maintain spine in neutral position while stabilizing with abdominal muscles to protect the low back during aerobic exercise.

Stationary bike for 20 to 30 minutes.



Treadmill for 20 to 30 minutes.



About Dr.Santosh Kumar

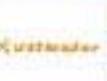


MBS (IPMER), D ORTH (IPMER); MCh ORTH (SCYHELLS)
Head - Department of Computer Assisted Joint Replacement Surgery: BELLE VUE CLINIC
JOINT REPLACEMENT SURGEON, ARTHRITIS FOUNDATION,INDIA
 Subspecialty- Knee Joint-Total Knee Replacement, Knee Arthroscopy
 Fellowship In Joint Replacement, Max Hospital, New Delhi
TRAINED IN COMPUTER ASSISTED JOINT REPLACEMENT FROM AUSTRIA
 Trained in Revision Knee and Hip Replacements
 Trained in Complex Joint Replacement from the DELTA FOUNDATION OF AUSTRALIA

INTRODUCTION

Dr Santosh Kumar and his team are leading knee specialists in Kolkata. He is one of the best doctors in knee replacement today. Knee replacements are routine in Kolkata (Calcutta) today and Dr Santosh Kumar has been instrumental in making international quality knee surgery affordable to the mass.

HE HAS EXPERIENCE OF MORE THAN TWO THOUSAND KNEE REPLACEMENTS



EDUCATION

MBBS - from Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER, Pondicherry) Government General of Health Services, West of India from 1996 to 2002
FCR&S (S) in Department of Orthopaedics, JIPMER from April 2002 to June 2002

POST GRADUATION

D ORTH from Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER, Pondicherry) Government General of Health Services, West of India from 31st April to 31st March 2003

SCHEMERE (IPMER)

In charge bone bank, JIPMER from April 2004 to March 2005. **TRANSVALE COURSE** online of ACPAS 2002
TRAINING IN SUPPORT at GMC, Kolkata January 2005
 Clinical Research Fellow in Orthopaedic Oncology at JIPMER Hospital from April 2005 to June 2006

RESEARCH EXPERIENCE

White line register in Orthopaedics at Mahabubnagar Orthopaedics and Related Research Center (MORC), Anantapur, Kolkata - 106 from 31st July 2006 to 31st June 2007

MCh ORTH

Passed MCh: ORTH from the University of Sydney, Australian Institute of Medicine, March 14th 2008
 MCh Thesis: a study into the controversial aspects of interlocking nail of femur

TRAINING

DELTA COURSE for advanced aspects of complex primary and revision knee replacement. At ANZ Hospital, New Delhi in 2006, 2008
FELLOWSHIP in Total Hip Replacement in Max Hospital, New Delhi from Sept, 2004 with Dr. A.K.S. Sinha for total of 60 knee replacements completed
 At IPMER Training in January July 2004
 At INJUMA Training job to 10th Oct, 2006, Bangalore
DELTA COURSE for Advanced Aspects of Complex Primary and Revision Knee Replacement, at ANZ Hospital, Hyderabad in Feb, 2008
 Revision joint replacement course in Jan 2009 Kolkata
 Trained in complex joint replacement, at Ingleok, Jan 2011 by DEPUY Institute at Ingleok
 Trained in revision joint replacement, by DEPUY Institute at Chennai, June 2011
 Medtronic Academy course in central spine in October 2011
 Trained in computer assisted knee replacement at Parik Chandigarh in Jan 2012
 At advanced training course in March 2012 at Kolkata

TRAINING | continued |

Trained in complex joint replacement in USA, (PHOENIX), by Curtis foundation (joint and tushar educational body) April 2012
 Trained in minimally invasive hip surgery by Medtronic Academy for a course May 2012
 Trained in computer assisted navigation technology for knee replacement in Vienna Austria, in June 2012

ARTICLES PUBLISHED / PRESENTED

Editorial feature allocation of Hip, ankle 1 - its management and the result - published in the West Bengal Journal of Orthopaedics - vol 22, number 2, September 2006, myself as Primary author
 The role of total hip replacement in relieving spasticity in patients - under consideration for publication in the Indian journal of orthopaedics
DRUGS COMPLIANCE - a method to reconstruct the post polio polioleic thumb - presented at the national 2006, West Bengal Orthopaedic Association
 Follow up of 20 total hip replacements in ankylosing spondylitis patients presented at the annual conference of the West Bengal Orthopaedic Association 2006

AWARDS RECEIVED

Dr Santosh Kumar received Certificate of International Excellence in Minimally Invasive Computer Assisted Joint Replacement Surgery by the ACCUJAP, ACCUJAP, Germany

