

# Understanding Hip Replacement

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## Definition

The hip joint refers to the joint where the acetabulum meets the femoral head, the joint is composed of cartilage, synovial membrane, and fibrous capsule and is freely moving (Fig.1).

The hip replacement refers to repairing of acetabulum and femoral head of the diseased hip joint, and replace it with a artificial joint (see Fig.2).



## Cause of disease

- Osteoarthritis: also called degenerative arthritis.
- Rheumatoid arthritis: caused by immune disorder.
- Suppurative arthritis: caused by infection
- Traumatic hip joint disease: caused by trauma.
- Femoral head avascular necrosis: caused by poor circulation of the femoral head.



## Diagnosis and treatment

- Palpation
- X ray film reading



## Rehabilitation exercise after surgery

Execute rehabilitation exercise after surgery with certainty (requires someone's help at the beginning).

- ◆ The normal limbs maintain full range motion.
- ◆ Strengthen the muscle tone of the arm and shoulder by raising sand bags.
- ◆ The operated leg performs foot extension, quadriceps exercise and ankle joint rotation.
- ◆ Outward extension of the thigh: Lie flat, extend the operated leg in an outward fashion. Do this for 20 times, twice a day (Fig.3).
- ◆ Knee extension exercise: When the patient is able to sit up after surgery, sit down by the edge of bed with a roll of bed sheet underneath the knee, extend the thigh to raise your leg (Fig.4).



圖三



圖四

- ◆ Leg extension and elevated exercise: Lie flat, bend the knee of your good leg, with the foot press against the bed, extend the operated leg fully and raise it up high as much as you can for a few seconds. Do this for 20 times twice a day (Fig.5).
- ◆ Pelvic exercise: Lie flat, bend both of your knees, press both soles and palms against the bed, raise your lower back by elevating the hip and thigh, hold for 5 seconds and then relax. You can use this method when using a bedpan. Do this for 20 times, three times a day (Fig.6).



Fig.5



Fig.6

- ◆ Gluteus contraction exercise: Contract the gluteal muscle towards the anus for about 5 seconds and then relax, do this for 20 times twice a day.
- ◆ Side kick extension exercise: Patients with single side hip replacement should practice standing before get out of bed walking; Stand on the good leg with one hand holds on to the door frame, extend the operated leg outward until you achieve a balanced posture.

- ◆ Knee flexing exercise: Lie flat, bend your thigh and knee of the operated leg and raise it towards your chest, practice flexing your knee and hip to strengthen the power of your leg. Do not exceed 90 degree when flexing the hip joint. Do this for 20 times three times a day.



### Things to watch out for in your daily life

- Follow closely to the correct postures in daily life, try to avoid the tabooed posture.

	Correct ○	Mistake X
Pick up objects	Bend the good knee while extending the operated knee, pick up object on a kneeling position. 	The curvature between the body and the hip is less than 90 degree. 
Go to bathroom	Raise the toilet seat if necessary 	The curvature between the body and the hip will be less than 90 degree if the toilet seat is too low. 



Go to bed	Arrange the comforter before you get into bed	Bend over to pull the comforter
Wearing shoes and socks	The level of the chair has to be high enough, better with handrail, to maintain that the knee level is lower than the hip.	Bend over your back, raise the leg or out-turn the hip joint too much.

- Avoid over flexing the lower back, lifting heavy objects, running and jumping, no long distance walking, no greater than 90 degree when flexing the hip joint to prevent dislocation.
- Continue to execute the rehabilitation exercise taught during hospitalization, and continue using cane or walking aid until further instruction from the doctors at the outpatient clinic.
- Take a shower when you need to bath yourself.
- Return to your job when your condition permits, start with an easy and short time job, gradually increase your activity and with plenty of rest.
- You can resume driving and sex life after six weeks, but your hip joint can only afford partial body weight with the first 3 months.
- Follow up visit regularly, return to the hospital when you

encounter:

- ◆ Redness, swollen, heat and sore in the wounded area.
- ◆ Injury to the hip joint caused by falling.
- ◆ Unusual noise comes from the hip joint.
- ◆ Serious pain.