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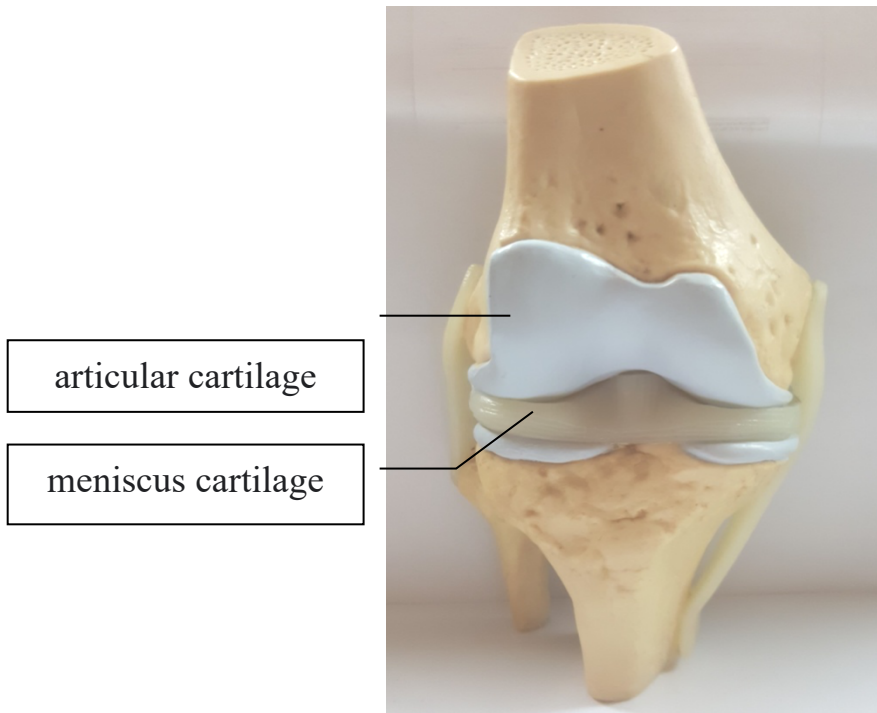
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## Total knee replacement patient information

### A. The normal knee Joint :

In a normal knee,the muscles and ligaments maintain the stability of the joint. Owing to the cartilage and synovial fluid secreted from synovial membrane,the knee joint moves smoothly and painlessly.



### B. The abnormal knee Joint :

The knee cartilage of patients with osteoarthritis is worn out. The patients with rheumatoid arthritis may experience inflammation and swelling of the knee joints.

When your knee is so painful and stiff that limit your daily activities, and medicine does not relieve the symptoms, you may consider the total knee replacement. This surgery can relieve the pain, and restore the stability and function of the knee.

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All information above has been reviewed by orthopedics surgeons specialists  
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### C. Preparations before surgery :

1. Electrocardiography(ECG;EKG), blood analysis, plain radiographs of the chest and the knee.
2. Anesthesia risk assessment before surgery and consent signature.
3. Sign the surgery consent after the interpretation and discussion with the surgeon.
4. The night before surgery, nursing staff will provide you enema to clean the intestine.
5. The day before or on the day of surgery, bathing with soap or a body wash containing antibacterial agents can effectively reduce bacterial colonies on the skin and reduce postoperative wound infection.
6. Do not have food or water for 8 hours before surgery.
7. In the morning of surgery day, the nurse will insert a venous catheter on your arm to facilitate the administration of drugs.

### D. Care after surgery:

1. Doctor will assess the situation to put a wound vacuum drainage tube, the nurse will assist and tell you how to keep the drainage tube unobstructed. If there is a drainage tube at the wound, it must be placed on the same side of the surgical site.
2. For wound pain after surgery, the doctor will prescribe oral painkillers for you to take regularly; if the pain does not improve after taking the painkillers for more than 1 hour, please inform the nurse to evaluate your condition and use other painkillers if necessary . Taking painkillers must pay attention to slow down and avoid bending over, so as not to cause dizziness and fall due to postural hypotension.
3. On the first day after the operation, depending on the recovery situation, a nurse or rehabilitator will assist you to use a walker to get out of bed; you should also shake the head of the bed when eating to avoid choking.

4. After surgery elevated your limb, like put the pillow under your leg may subside swelling. To keep the knee in full extension (Figure 1), do not put the pillow under your knee (Figure 2).



Figure 1 ( Correct )

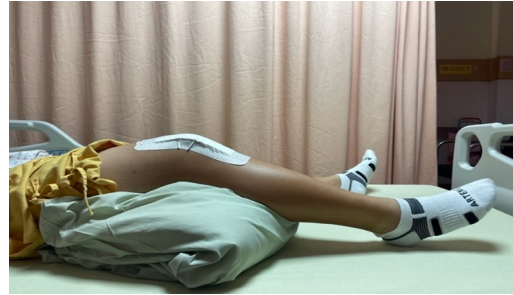


Figure 2 ( Incorrect )

5. Please tell the nurses for assistance if you feel pain.
6. On the first day after surgery, the rehabilitator will teach rehabilitation exercises to avoid muscle deterioration and joint stiffness so that you can get out of bed and walk before go home. You need to take rehabilitation exercises, such as quadriceps setting exercise, ankle pumping exercise, and straight leg raising exercise. These exercises are illustratedas follows:

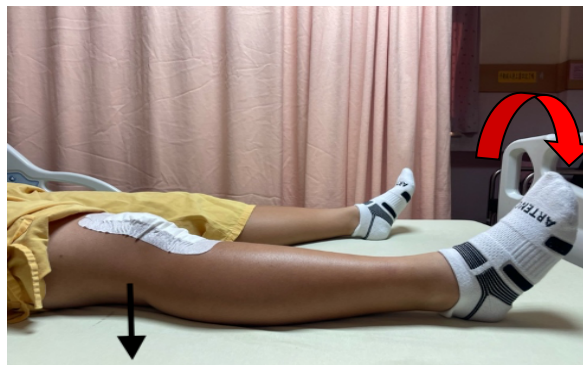


Figure 3

Quadriceps setting exercise(figure3): lying on the bed, contract and hold your front thigh muscle, make your knee straight and contact the bed. Hold this posture for 5 seconds.



Figure 4

Ankle pumping exercise (figure 4): while doing quadriceps setting exercise, dorsally flex your foot simultaneously. This can help strengthen the limb muscles.



Figure 5

Straight leg raising exercise (figure 5): lie down and place the knee straight on the bed, then lift the lower limb off the bed with knee fully extended.

7. Depending on how you bend. The nurses will help you how to start knee flexion exercise by machine (figure 6). The nurses will also tell you the way to start knee flexion exercise when sit on the edge of the bed (figure 7).



Figure 6 Knee flexion exercise by machine



Figure 7 Knee flexion exercise when sitting

8. The nurses or rehabilitator will tell you how to use the crutches, walker or wheelchair to get out of bed and walk.
9. You should not take shower or use the bathtub until the stitches have been removed.

#### E. Self-care at home after total knee arthroplasty :

1. Please take knee flexion exercise everyday to increase range of motion of the knee underwent the surgery.
2. You should walk with walker or crutches until the doctor tells you that they are no longer necessary.
3. Please decrease ambulation and elevate your legs if they swell after walking.
4. You should avoid violent exercises in order to prolong the lifetime of the implanted artificial knee.
5. Before the stitches are removed, please avoid drinking alcohol or Chinese herbal medicines such as angelica and ginseng. You can take a bath three days after the stitches are removed from the wound. When entering and leaving the bathroom, you must be careful to slow down to avoid slipping and injury again.
6. Please inform the doctor that you have undergone the surgery if you unfortunately get injured or have to make teeth extracted. Antibiotics are necessary to prevent knee infection.
7. Please go to see the doctor according to the doctor's prescriptions.
8. Please keep the surgical wound dry. If the following conditions happen, You should also go to see the doctor:
  - (1)It becomes red, swell, hot and painful.
  - (2)It gets injured after falling.
  - (3)The range of motion decreases.

#### F. Summarize :

Rehabilitation exercise can be started on the day after the operation, and assistive devices (walkers, crutches or wheelchairs) must be used when getting out of bed, and the assistive devices should be used for at least three months until the doctor tells them not to use them; 10-14 days after the operation during the return visit, the doctor will look at the condition of the wound and remove the stitches. Before the stitches are removed, please avoid eating Chinese herbal medicines such as angelica and ginseng to avoid bleeding from the wound. You can remove the dressing and take a shower 3 days after the stitches are removed to avoid take a bath and reduce the occurrence of infection.

## G.Reference :

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Let's take the quiz to make sure you understand

1. You must stop eating and drinking 8 hours before artificial knee replacement surgery.

Yes No No idea

2. You must stop eating and drinking 8 hours before artificial knee replacement surgery.

Yes No No idea

3. After artificial knee replacement surgery, you can immediately take Chinese herbal medicines.

Yes No No idea

4. Continue to perform rehabilitation exercises such as knee self-bending exercises and use walkers or crutches within three months after until the doctor tells you that you no longer need to use them.

Yes No No idea

5. After surgery, if you return home and find that the wound is red, swollen, hot, painful and secreted, you should seek medical attention immediately.

Yes No No idea