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THE KNEE JOINT

Objectives : To mobilise the knee, to strengthen the quadriceps and to strengthen the ischiocrural muscles.

How to do it : The exercises shall be performed preferably on a hard surface. Take care to see that the the legs are not obstructed in their movements by clothing.

Exercises A : Lying on the back

Exercises 1

Starting Position : Lying on the back with both legs stretched out straight.

Method : Pressing the knee down firmly on the floor, pull the toes in towards the body. In the beginning it is advisable to do the exercise with both legs simultaneously.

Exercises 2

Starting Position : Lying on the back, with both legs stretched out straight.

Method : First, pull the toes inwards towards the body, press the knee firmly against the floor and then raise the leg to the maximum level possible.
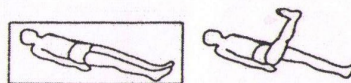Revert to starting position and repeat the exercise with the other leg.

Exercises 3

Starting Position : Lying on the back with both legs stretched out straight.

Method : Pull the toes inwards towards th body, press the knee firmly against the floor and raise the leg diagonally inwards over the other leg.
Revert to starting position and repeat the movement with the other leg.
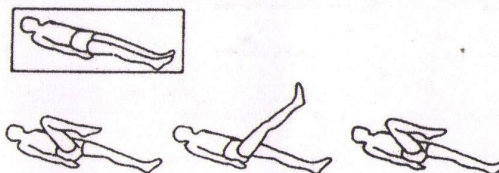

Exercises 4

Starting Position : Lying on the back with both legs stretched out straight.

Method : Pull the toes inwards towards the body, press the knee against the floor and then raise the leg diagonally outwards.
Revert to starting position and repeat the movement with the other leg.

Exercises 5

Starting Position : Lying on the back with both legs stretched out.

Method : Bending the knee, bring the leg upwards over the chest. Then raise the leg upwards to the maximum level possible. Revert to starting position by doing the movement in the inverse direction.

Exercises B : Lying on the side

Exercises 1

Starting Position : Lying on the right side, with right arm tucked under the neck, right leg bent double and left leg stretched out along the body-axis.

Method : Bend the left knee over the chest and then stretch the leg out towards the back of the body, on the floor.

Exercises 2

Starting Position : Lying on the affected side, lower arm tucked under the neck, lower leg bent slightly at the knee, upper leg bent double, over the lower leg and touching the floor.

Method : Bend the lower leg and then stretch it to its full length.

Exercises C : Lying face downwards
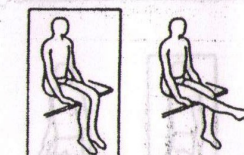

Exercises 1

Starting Position : Lying face downwards, legs stretched out, hands under the forehead.

Method : Without moving the left leg, raise the right leg upwards from the knee at right angle to the thigh.
Repeat with the other leg.

Exercises D : Seated upon a table
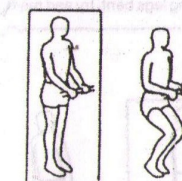

Exercises 1

Starting Position : Sitting upon a table, legs dangling.

Method : Raise the leg slowly stretching the knee.
Repeat the exercise picking up a weight to upto 3 kgs. with the foot.
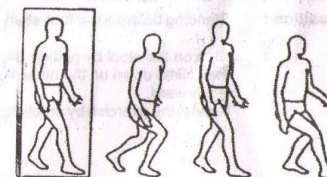

Exercises E : Standing

Exercises 1

Starting Position : Standing, both feet together, holding on tightly to a window-frame or any other fixed point.

Method : Bend both legs, as if to sit, and lower yourself to the maximum, without losing your balance.

Exercises 2

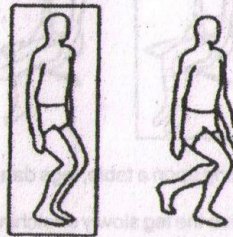**Starting Position :** Standing, with affected leg a step forward.

Method : i) Putting the weight of the body on the foot in front, bend and straighten that leg.
ii) Put the weight of the body on the leg behind and bend and straighten that leg.
Repeat the exercise by changing the position of the legs.
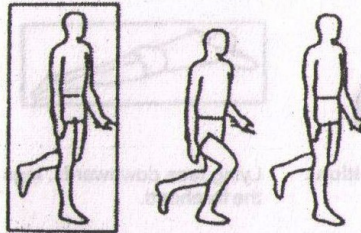
Exercises 3

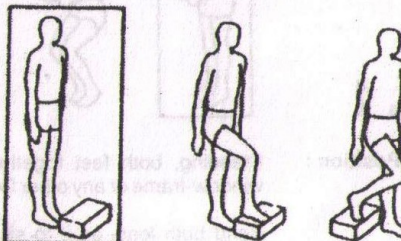**Starting Position :** Standing on the affected leg, the other leg lifted up slightly, holding on the side of a table or a bed.

Method : Bend the affected leg and then straighten yourself.

Exercises 4

Starting Position : Standing with legs together, bend both legs as much as you can.

Method : Keeping legs bent, try and move forwards.

Exercises 5
(Practical exercise for negotiating stairs)

Starting Position : Standing before a low foot-stool.

Method : Step on the stool by putting the affected leg up first and then climb down on the other side by putting the healthy leg forward.
Repeat the exercise by practicing on a staircase.