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**Programme: BPED , physical education**

**course title : SPORTS MEDICINE**

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**UNIT – V LOWER EXTREMITY INJURIES AND EXERCISE**

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**DEPT OF PHYSICAL EDUCATION&YOGA**

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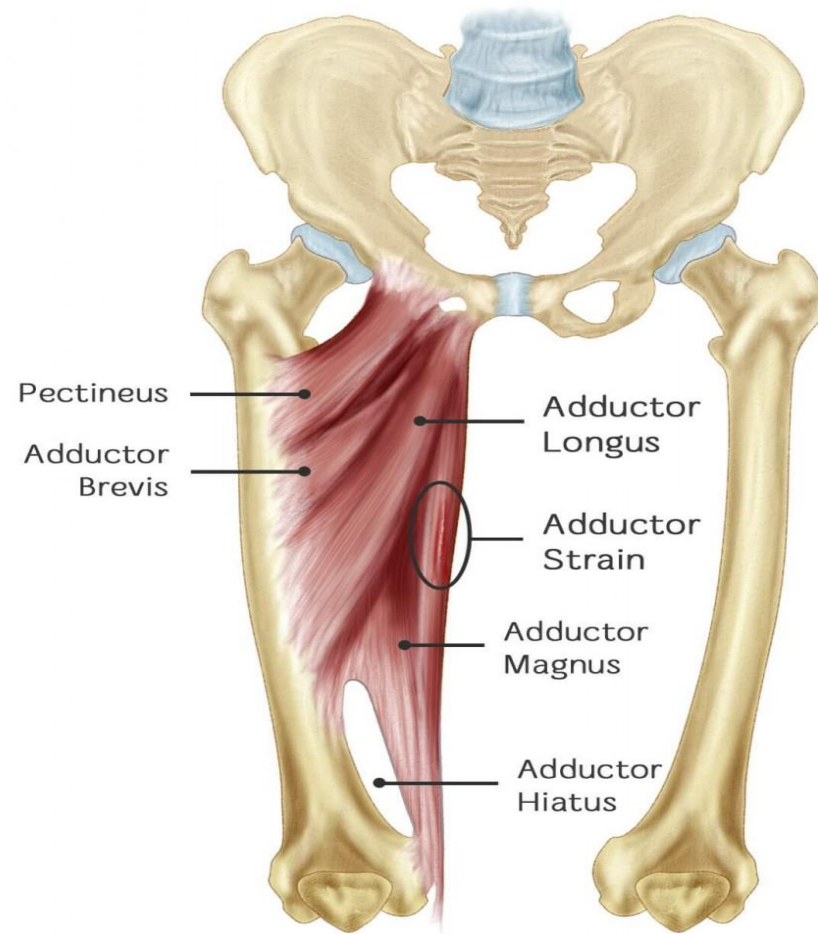
**DEPT OF PHYSICAL EDUCATION&YOGA**

# Lower limb and abdomen injuries

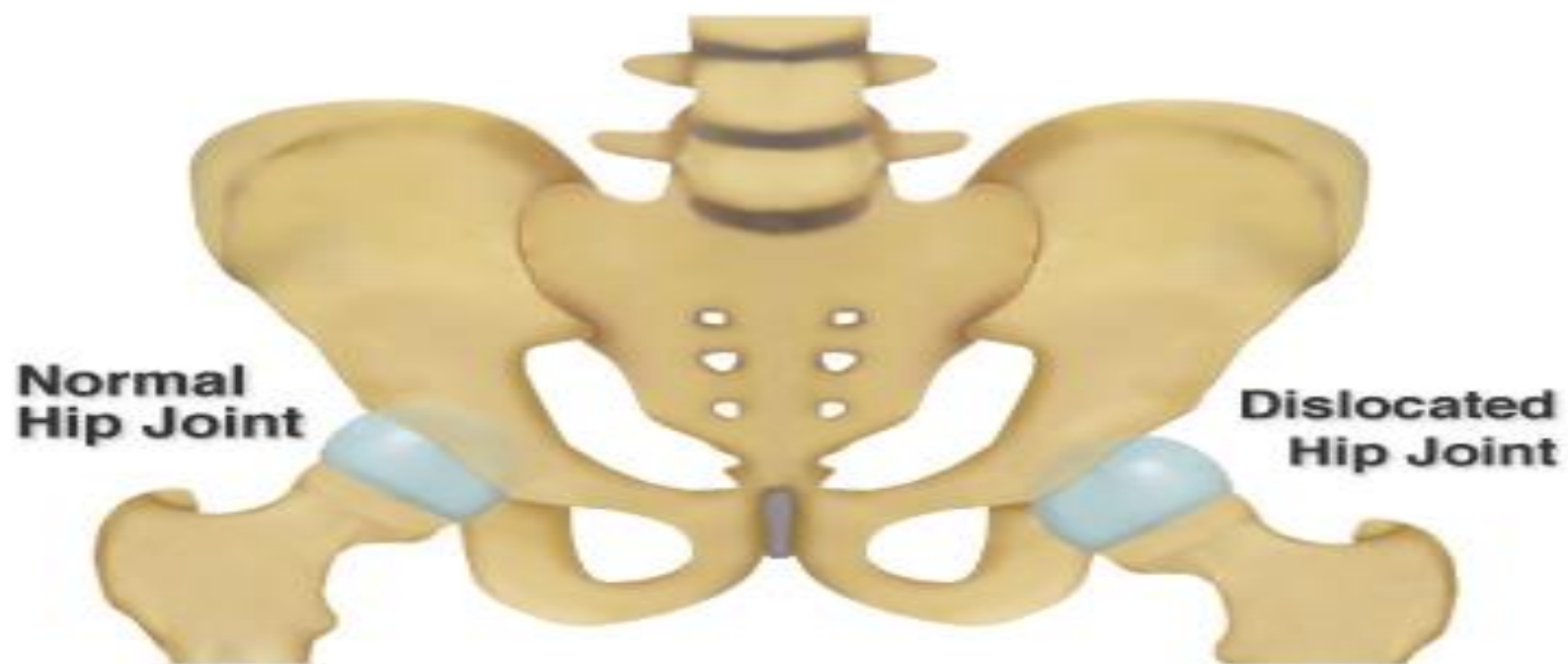
- **Hip Adductor Strain**

- The hip is a ball and socket joint connecting the thigh bone (femur) to the pelvis socket. It allows the leg to move. The hip joint is composed of multiple parts, including that of the lesser and greater trochanters. The greater trochanter is the place where countless muscles from the buttocks allow and meet to promote hip abduction and movement from one side to the other. When it comes to the lesser trochanter, this is the point where the iliopsoas muscle is attached to the hip joint to provide for forward movement within the leg, which is otherwise referred to as hip flexion

## Adductor Strain



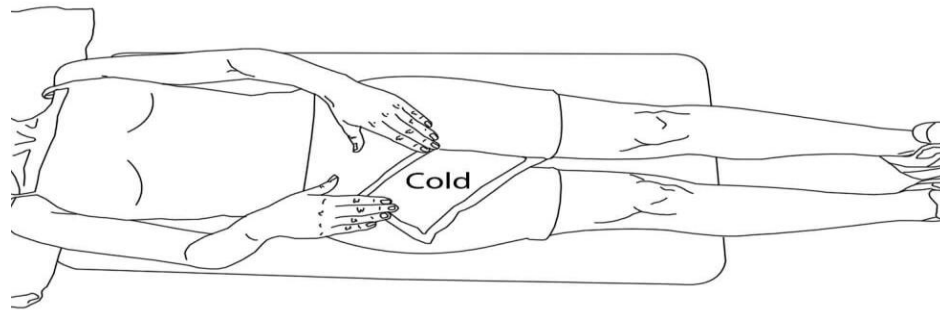
# Dislocated Hip



# strapping

## 1.Ice

- Apply ice to the affected are for 5-10 minutes at a time, three to five times per day. Ice helps to reduce swelling and inflammation, which will help to minimize pain in the area.



## **2. Anti-Inflammatory Medication**

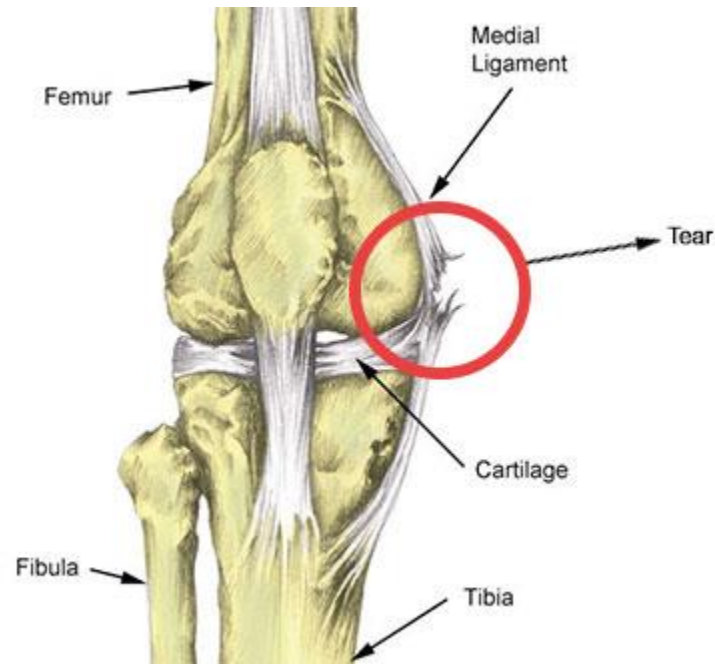
An anti-inflammatory medication will help to reduce inflammation in the affected joint. When you are able to reduce inflammation, it will help to decrease the amount of pain you are feeling in the area. Discuss with your therapist how long you should use it for, and if you should take it after food. Ice and/or heat might work just as well as medication.

### **3.Rest**

Resting the injured area, either by refraining from physical activity or changing to another activity that won't affect the hip, such as swimming, is another component to aid in the healing process. Speak to your therapist about when you can return to sport.

# Knee Sprain ,strain , strapping

- Knee strains involve a tendon or muscle tear around the knee. Symptoms can include cramping, spasms, swelling, and bruising. A knee strain can happen due to twisting, overuse of the muscle, or an injury such as a sports injury.



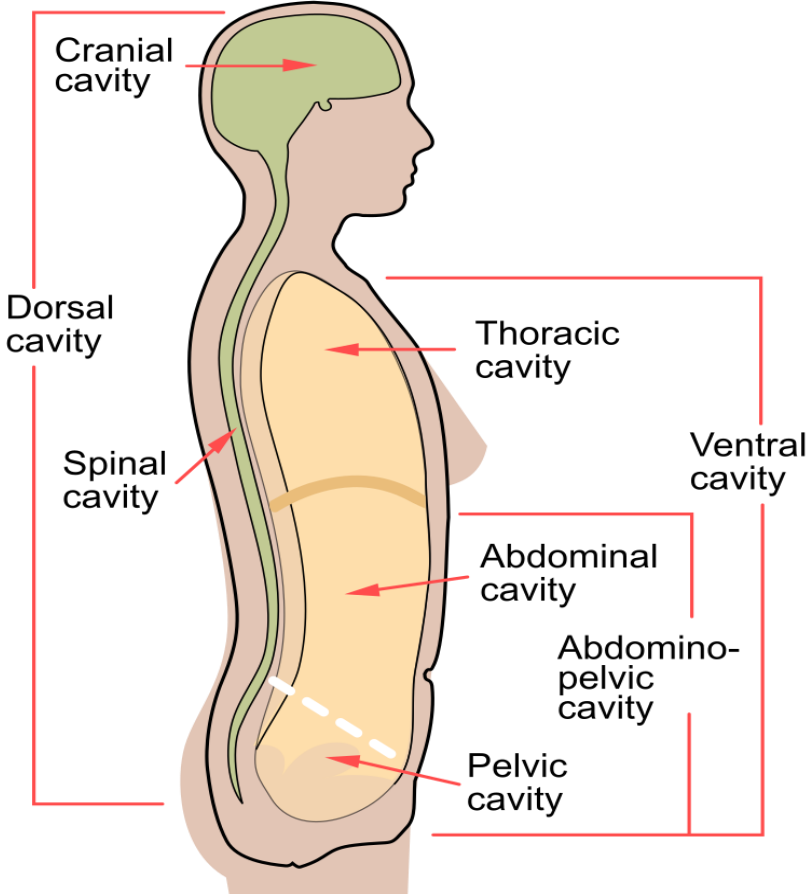


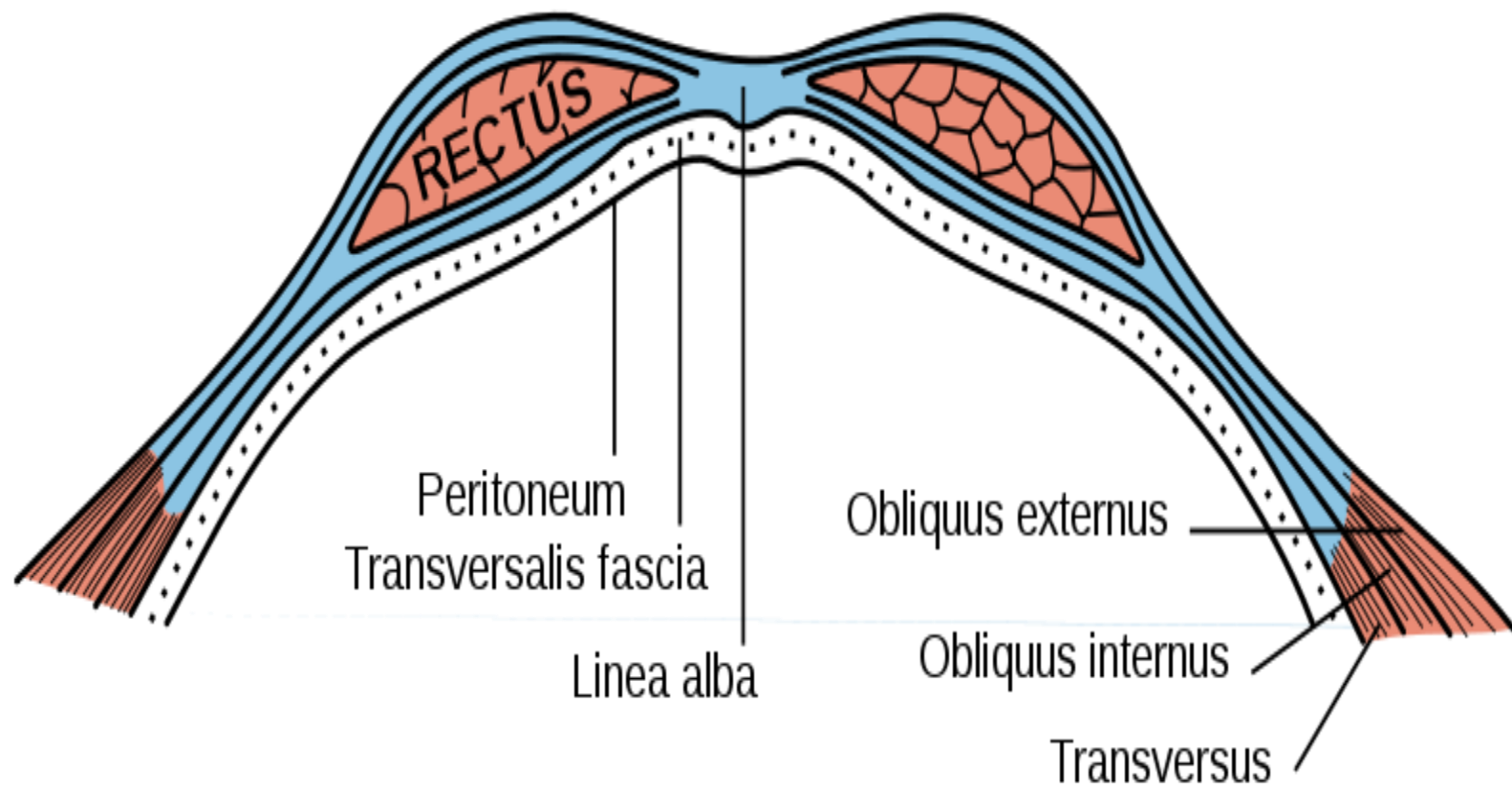
# strapping

- **Following certain knee injuries** – Knee strapping may be beneficial following certain knee injuries (such as sprains). This should be discussed with the treating physiotherapist as certain knee injuries should not be taped – such as some fractures.
- **To prevent injury or injury aggravation** – Knee strapping may be beneficial during sports or activities that place the knee at risk of injury or injury aggravation (such as skiing, rugby, basketball etc.)



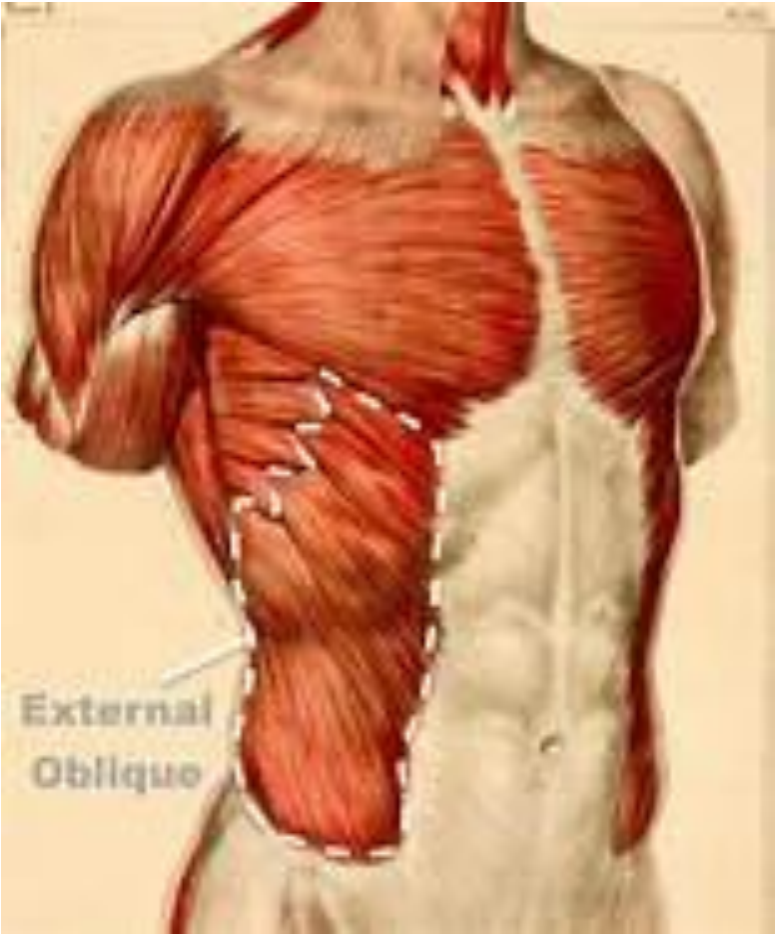
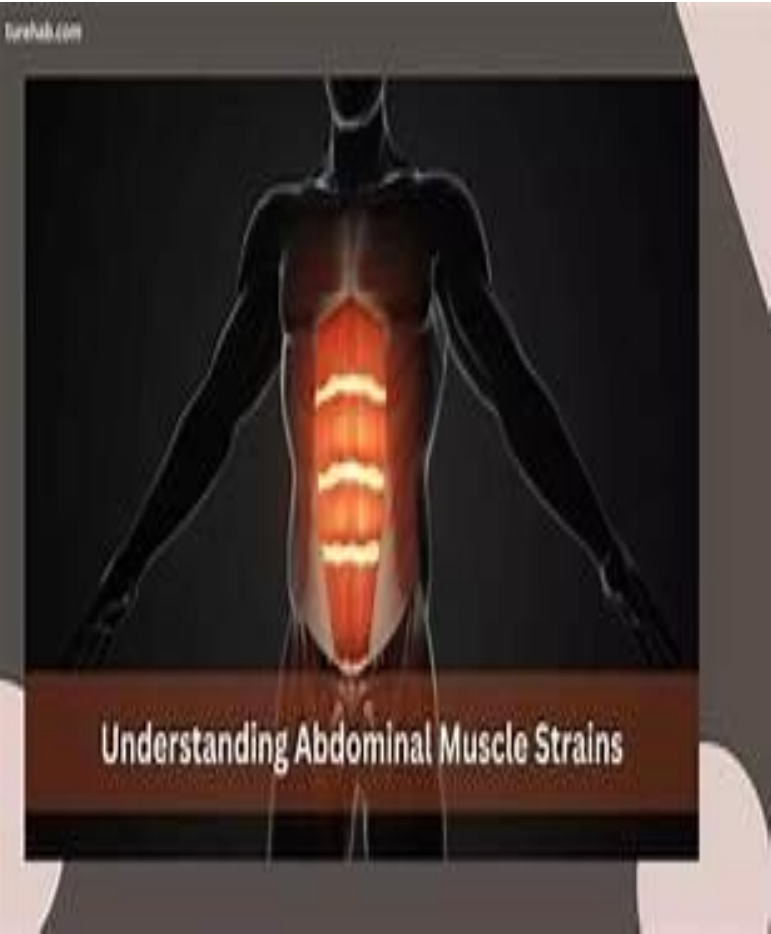
# Abdominal wall





There is a common set of layers covering and forming all the walls: the deepest being the [visceral peritoneum](#), which covers many of the abdominal organs (most of the large and small intestines, for example), and the [parietal peritoneum](#)—which covers the visceral peritoneum below it, the [extraperitoneal fat](#), the [transversalis fascia](#), the internal and external oblique and transversus abdominis aponeurosis, and a layer of [fascia](#), which has different names according to what it covers

# Abdominal muscle strain



## **Abdominal Muscle Strain or Inflammation**

- An abdominal strain is a tear or rupture of part of the abdominal muscles.
- We look at symptoms and treatment options.

### **Symptoms of Abdominal Muscle Strain**

- Tenderness and inflammation over an area of the rectus abdominis (usually at the bottom).
- A sudden sharp pain in the abdominal muscles which would indicate a rupture.
- An increase in pain when the abdominal muscles are contracted e.g. doing a stomach **crunch**.

# Stretching and strengthening exercise for hip

- [Squats](#)
- [Swimming Superman](#)
- [Side Lunges](#)
- [Having Babies](#)
- [Banded Walk](#)
- [Side-lying Leg Lifts](#)
- [Plié Squats](#)
- [Half Jacks](#)
- [Clamshell Exercise](#)
- [Reverse Clam Shell](#)
- [Scorpions](#)
- [Hip Circles](#)
- [Single-Leg Hip Circles](#)
- [Floor Hip Flexor Exercise](#)
- [Baseball Swings](#)
- [Donkey kicks](#)
- [Speed Skaters](#)
- [Bridge](#)
- [Single-Leg Bridges](#)
- [Hip Abductors](#)
- [Gator Bites](#)
- [Glute Back Presses](#)



# Stretching and strengthening exercise for knee

The knee is the largest joint in the body that connects the shin and thigh bones. The knee has [cartilage, muscles, ligaments, and nerves](#) that all play a role in the health and movement of the joint. In some cases, knee pain and weakness can occur. Healthcare providers may recommend stretches and exercises to help with knee pain while strengthening the muscles around the joint.

## Benefits of Knee Strengthening Exercises

- Prevention of [cartilage degeneration](#) (loss of protective tissue between joints)
- Lowering inflammation in the knee
- Preventing the loss of bone
- Improving [pain](#), stiffness, and joint dysfunction
- Improving the strength of the knee
- Improving mobility

- Leg Lifts
- Standing Hamstring Curls
- Hamstring Curls on a Weight Bench
- Single Leg Dip
- Wall Squats
- **Exercise Stretching**
- Reduce post-exercise soreness
- Improve recovery times
- Increase range of motion in the knee
- Stretching every time you finish the exercises mentioned above can help improve how quickly and effectively you strengthen your knees.