MCL INJURIES

Definition

Medial Collateral Ligament (MCL) injury is an injury to the ligament on the inner part of the knee. This ligament keeps the shin bone (tibia) in place. It can be a stretch, partial tear or complete tear of the ligament.

Causes

The MCL is usually injured by pressure or stress on the outside part of the knee. A block to the outside part of the knee during football is a common way for this ligament to be injured. It is often injured at the same time as an anterior cruciate ligament (ACL) injury occurs.

Symptoms

Symptoms of a tear in the medial collateral ligament are:

- Knee Swelling
- Locking or catching of the knee with movement
- Pain and tenderness along the inside of the joint
- The knee gives way or feels like it is going to give way when it is active or stressed in a certain way

First Aid

A health care provider should examine your knee. A MCL test will be done to detect looseness of the ligament. This test involves bending the knee to 25 degrees and putting pressure on the outside surface of the knee. Other tests may include:

- Knee joint x-rays
- Knee MRI

Treatment Includes:

- Applying ice to the area
- Nonsteroidal anti-inflammatory drugs (NSAIDS)
- Raising the knee above heart level

You should limit physical activity until the pain and swelling go away. The health care provider may put you on crutches and in a brace to protect the ligament. You may also be told not to put any weight on your knee when you walk. After a period of keeping the knee still, you will be given exercises to strengthen and stretch the knee. Physical therapy may help you regain knee and leg strength. Surgery is often not needed when only the MCL has been torn. If you need surgery, it is often done using arthroscopy, through a small surgical cut.

When to Contact a Medical Professional

Call your health care provider if:

- You have symptoms of a MCL injury
- You are being treated for a MCL injury and you notice increased instability in your knee, pain or swelling after they initially faded or your injury does not get better with time
- You re-injure your knee

Prevention

Use proper techniques when playing sports or exercising. A proper strength, conditioning and stretching program may reduce the risk of injury. Many cases are not preventable.



MRSA

Definition

MRSA refers to a bacterial infection that is highly resistant to some antibiotics. MRSA is a strain of Staphylococcus aureus bacteria. S.aureus is a common type of bacteria that normally live on the skin and sometimes in the nasal passages of healthy people. MRSA refers to strains that do not respond to some of the antibiotics used to treat staph infections.

Causes

The bacteria can cause infection when they enter the body through a cut or sore. The infection can be minor and local (a pimple), or more serious (involving the heart, lungs, blood or bones). These infections have occurred among athletes who share equipment, mats or personal items (such as towels or razors). Those who get tattoos are also at risk.

Symptoms

Staph skin infections cause a red, swollen, and painful area on the skin. Other symptoms include:

- Drainage of pus or other fluids from the site
- Fever
- Skin abscess
- Warmth around the infected area

Symptoms of a more serious staph infection may include:

- Chest pain
- Chills
- Cough
- Fatigue
- Headache
- Muscle aches
- Rash
- Shortness of breath

When to Contact a Medical Professional

- A wound seems to get worse rather than heal
- You have any other symptoms of staph infection

Treatment may range from simply draining the skin sore to a series of antibiotics or other treatments. Always finish all doses of antibiotics you have been given.

Prevention

- Wash your hands frequently
- Do not share personal items such as towels or razors with another person—MRSA can be transmitted through contaminated items.
- Cover all wounds with a clean bandage, and avoid contact with other people's soiled bandages.
- If you share sporting equipment, clean it first with antiseptic solution.
- Avoid common whirlpools or saunas if another participant has an open sore.
- Make sure that shared bathing facilities are clean



PLANTAR FASCIITIS

Definition

Plantar fasciitis is irritation and swelling of the thick tissue on the bottom of the foot. The plantar fascia is a very thick band of tissue that connects the heel bone to the toes. This band of tissue is what creates the arch of the foot. When the fascia is overstretched or overused, it can become inflamed. When the fascia is inflamed, it can be painful and make walking more difficult.

Causes

- Foot arch problems (both flat feet and high arches)
- Obesity
- Repetitive long-distance running, especially running downhill or on uneven surfaces
- Sudden weight gain
- Tight Achilles tendon (the tendon connecting the calf muscles to the heel)
- Shoes with poor arch support or soft soles

Plantar fasciitis is commonly thought of as being caused by a heel spur, but research has found that this is not the case. On x-ray, heel spurs are seen in people with and without plantar fasciitis.

Symptoms

The most common complaint is pain in the bottom of the heel, which is usually worse in the morning and may improve throughout the day. By the end of the day the pain may be replaced by a dull ache that improves with rest.

Treatment

Conservative treatment is usually successful, given enough time. Treatment can last from several months to 2 years before symptoms get better. Most patients will be better in 9 months.

Initial treatment usually consists of:

- Anti-inflammatory medications
- Heel stretching exercises

To relieve plantar fasciitis:

- Apply ice to the painful area. Do this at least twice a day for 10 15 minutes, more often in the first couple of days.
- Rest as much as possible for at least a week.
- Take acetaminophen for pain or ibuprofen for pain and inflammation.
- Try wearing a heel cup, felt pads in the heel area, or an orthotic device.
- Use night splints to stretch the injured fascia and allow it to heal.
- Wear properly fitting shoes.

If these fail, putting the affected foot in a short leg cast (a cast up to but not above the knee) for 3-6 weeks is often successful in reducing pain and inflammation. Alternatively, a cast boot (which looks like a ski boot) may be used. It is still worn full time, but can be removed for bathing.

Some physicians will offer steroid injections, which can provide lasting relief in many people. However, this injection is very painful and not for everyone.

In a few patients, non-surgical treatment fails and surgery to release the tight, inflamed fascia becomes necessary.



ROTATOR CUFF

Definition

Your rotator cuff is made up of the muscles and tendons in your shoulder. These muscles and tendons connect your upper arm bone with your shoulder blade. They also help hold the ball of your upper arm bone firmly in your shoulder socket. The combination results in the greatest range of motion of any joint in your body.

A rotator cuff injury includes any type of irritation or damage to your rotator cuff muscles or tendons. Causes of a rotator cuff injury may include falling, lifting and repetitive arm activities — especially those done overhead, such as baseball, tennis or swimming.

About half of the time, a rotator cuff injury can heal with self-care measures or exercise therapy.

Causes

Four major muscles (subscapularis, supraspinatus, infraspinatus and teres minor) and their tendons connect your upper arm bone (humerus) with your shoulder blade (scapula). A rotator cuff injury, which is fairly common, involves any type of irritation or damage to your rotator cuff muscles or tendons, including:

- General wear and tear as you get older or participate in repetitive movement activities
- **Tendinitis.** Tendons in your rotator cuff can become inflamed due to overuse or overload, especially if you're an athlete who performs a lot of overhead activities, such as in tennis or racquetball. Left untreated, tendinitis can weaken a tendon and lead to chronic tendon degeneration or to a tendon tear.
- **Bursitis.** The fluid-filled sac (bursa) between your shoulder joint and rotator cuff tendons can become irritated and inflamed.
- Strain or tear. Stress from overuse also can cause a shoulder tendon or muscle to tear.

Treatment and Interventions

Most of the time, rest and exercise therapy are used as a treatment. Your doctor or a physical therapist will talk with you about specific exercises designed to help heal your injury, improve the flexibility of your rotator cuff and shoulder muscles, and provide balanced shoulder muscle strength. Depending on the severity of your injury, physical therapy may take from several weeks to several months to reach maximum effectiveness.

Other rotator cuff injury treatments may include:

- **Steroid injections.** Depending on the severity of your pain, your doctor may use a corticosteroid injection to relieve inflammation and pain.
- **Surgery.** If you have a large tear in your rotator cuff, you may need surgery to repair the tear. Sometimes during this kind of surgery doctors may remove a bone spur or calcium deposits. The surgery may be performed as an open repair, as a mini-open repair, or as an arthroscopic repair with the aid of a small camera inserted through a smaller incision.
- **Arthroplasty.** Some long-standing rotator cuff tears over time may contribute to the development of rotator cuff arthropathy, which can include severe arthritis. In such cases, your doctor may discuss with you more extensive surgical options, including partial shoulder replacement (hemiarthroplasty) or total shoulder replacement (prosthetic arthroplasty).



SHIN SPLINTS

Definition

Shin splints refers to a condition that causes pain and sometimes swelling in the front part of the lower leg (shin). The pain is most likely from repeated stress on the shin bone (tibia) and the tissue that connects the muscle to the tibia. Although the term shin splints is often uses, it is not a defined medical diagnosis.

Causes

Most people get shin splints from repeated pounding on hard surfaces during activities such as running, basketball, or tennis.

Additional causes include:

- A change to new running or workout shoes or wearing shoes that don't have enough support. This can happen when your shoes wear out from overuse.
- Running or walking on a different surface than you are used to. For example, you might get shin splints when switching from running on a trail to concrete.
- A sudden change in activity; such as, working out harder than usual or increasing training too fast instead of working up to a training level gradually.
- Flat feet or a very rigid arch, which may place more stress on the lower leg.

Symptoms

- Pain in the front of the lower legs
- Pain along the inside of the tibia, the large bone in the lower part of the leg
- Minor swelling
- Pain may be dull to sharp during activity

First Aid

In many cases you can use home treatment to help relieve pain and swelling from shin splints.

- Rest. Complete rest for the first two weeks is best, but you don't have to stop exercising. The idea is that you can exercise as long as it isn't painful.
- Choose low-impact activities such as swimming or cycling instead of, or in combination with, running or other high-impact
 activities.
- Run or exercise only on soft surfaces, such as dirt or grass.
- · Avoid hills and inclines when training.
- Reduce speed, duration and distance when training.
- Apply ice or a cold pack for 10 to 20 minutes, 3 or more times a day.
- Elevate your lower leg while you apply ice and anytime you sit or lie down
- Use over-the-counter pain medication such as ibuprofen
- See a therapist about proper shoes, stretches and exercises which may help.

When to Contact a Medical Professional

- The pain continues and is persistent, even with rest
- You are not sure whether the pain is caused by shin splints
- You don't improve with home treatment after several weeks
- You have a stress fracture



SPRAINS

Definition

A sprain is an injury to the ligaments around a joint. Ligaments are strong, flexible fibers that hold bones together. When a ligament is stretched too far or tears, the joint becomes painful and swells.

Causes

Sprains are caused when a joint is forced to move into an unnatural position. For example, "twisting" one's ankle causes a sprain to the ligaments around the ankle.

Symptoms

- Pain and difficulty moving the injured joint
- Discolored and bruised skin
- Swelling
- Joint stiffness

First Aid

- Apply ice immediately to reduce swelling. Wrap ice in a cloth; avoid using directly on the skin. Apply for 10-15 minutes hourly the first day and then every 3 to 4 hours.
- Try NOT to move the affected area. To help you do this, bandage the affected area firmly, but not tightly. ACE bandages work well. Use a splint if necessary.
- Rest the affected joint for several days.
- Keep the swollen joint elevated above the level of the heart, even while sleeping.
- Asprin, ibuprofen or other pain relievers can help. DO NOT give aspirin to children.
- Keep pressure off the injured area until pain subsides (usually 7-10 days for mild sprains and 3-5 weeks for severe sprains). Rehabilitation to regain motion and strength should begin with one week.

When to Contact a Medical Professional

- You suspect a broken bone
- The joint appears to be deformed
- You have a serious injury or the pain is severe
- There is an audible popping sound and immediate difficulty using the joint
- The swelling does not go down within 2 days
- You have symptoms of infection: the area becomes red, warm, or you have fever 100°+
- The pain does not go away after several weeks

Prevention

- Wear protective footwear for activities that place stress on the ankle and other joints
- Always warm-up and stretch prior to exercise and sports
- Avoid sports and activities for which you are not conditioned



STRAINS

Definition

A strain is when a muscle becomes overstretched and tears. This painful injury, also called a "pulled muscle," can be caused by an accident, improper use of a muscle, or overuse of a muscle. Strains can happen suddenly or develop over time. Back and hamstring muscle strains are common.

Causes

- Excessive physical activity or effort
- Improper warming up before a physical activity
- Poor flexibility

Symptoms

- Pain and difficulty moving the injured muscle
- Discolored and bruised skin
- Swelling

First Aid

- Apply ice immediately to reduce swelling. Wrap ice in a cloth; avoid using directly on the skin. Apply for 10-15 minutes hourly the first day and then every 3 to 4 hours.
- Use ice for the first 3 days, or until swelling is gone. After that, either ice or heat may be helpful.
- Rest the pulled muscle for at least a day. Keep the area elevated above the heart if possible.
- Avoid using a strained muscle while it is still painful. When the pain subsides, start activity slowly
 and in moderation.

When to Contact a Medical Professional

- You are unable to move the muscle.
- The injury is bleeding
- The pain does not go away for several weeks after rest

Prevention

- Warm-up properly before exercise, sports and strenuous activity. Proper warm-up includes a gradual build up of activity until perspiration begins. Stretch only after warming up. A cold muscle is more likely to tear during stretching.
- Keep your muscles strong and flexible through regular strength, conditioning and flexibility activities.
- Wear proper shoes and make sure to use all protective equipment.



TURF TOE

Definition

Turf toe is the strain or tearing of the ligaments located underneath the toe.

Causes

Turf toe is caused by a severe hyperextension of the big toe. This injury commonly occurs on artificial surfaces, hence the name turf toe. Turf toe is prevalent in football, soccer, and even basketball.

Symptoms

- Pain
- Swelling
- Tenderness at the joint of big toe.

Pain will increase as the big toe is pulled or stretched upward.

First Aid

Turf toe should be treated with:

- Ice
- Compression bandages & a protective brace
- Pain relievers such as non-steroidal anti-inflammatory drugs (like ibuprofen)
- Rest and take weight off the toe.

Do NOT play again until you have been evaluated and treated. Some people may need crutches to walk, to take weight off of the big toe, until the swelling and pain have improved. Others, with less severe pain, may choose to brace or wrap the big toe for additional support.

Seek a Medical Professional to:

- X-ray toe to check for fractures.
- Tape/brace toe to prevent unwanted movement
- Advise treatment and rehabilitation

