



ISSN Print: 2664-7281
ISSN Online: 2664-729X
Impact Factor: RJIF 8
IJSEPE 2025; 7(1): 23-28
www.sportsjournals.net
Received: 07-10-2024
Accepted: 13-11-2024

Anand S Chanagi
Government First Grade
College Harugeri, Tq Raibag,
Belagavi, Karnataka, India

Sports physiotherapy

Anand S Chanagi

DOI: <https://doi.org/10.33545/26647281.2025.v7.i1a.152>

Abstract

Sports physiotherapy is a branch of physical therapy that is geared towards both athletes and casual players who have suffered an injury or ongoing problem. Sports physiotherapy is a specialized form of physiotherapy that is designed to help with injuries or conditions occurred during sports activities. The modalities include hands-on treatment and rehabilitation. Whether you're a professional athlete or at the beginning of your athletic journey, sports physiotherapy can be a suitable form of treatment for you.

Keywords: Injuries, strain, techniques, ligament, exercise, disorder, treatment

Introduction

Sports activities, whether professional or otherwise, can cause muscle strain or even serious injuries. If these problems are not given proper medical attention and treatment, they can worsen. However, these unwanted injuries can now be alleviated and prevented from happening again through the application of sports physiotherapy. You can maximize your performance and prevent future injuries through various techniques and exercises. Sports physiotherapy is meant to help you get back on track as soon as possible in a safe, secure, and effective way. The treated conditions through sports physiotherapy differ from the nerve, ligament, or muscle injuries to other musculoskeletal disorders.

The Key Areas of Sports Physiotherapy Include

- Examining and diagnosing injuries
- Identifying the cause of an injury
- Designing an individual treatment plan
- Rehabilitation
- Performance enhancement

How does it work?

Sports injuries are high-performance injuries that require utmost care. A Sports physiotherapist works closely with the athlete/ team to identify the requirements of a particular sport and bring out the best result post-injury in performance. For instance, if a midfield footballer injures his ankle while playing football and goes through rehab. He is given specialized rehab exercises to be able to run, cut directions and manipulate the ball like before the injury as per his sport. Depending on the sport a customized rehab program is designed to assist the athlete back to the sport.

Sports physiotherapy can in fact provide various treatment modalities. The treatment approaches towards back pain and neck pain in regular patients will be dealt with various treatment techniques used in sports therapy and mainly on movement rehabilitation. For instance, Running has been taken up by many regular individuals for fitness, but they struggle with injuries due to a lack of guidance/knowledge.

Players are at risk of injury at any moment, they can sustain injuries to the head, face, shoulder, arm, thigh, and knee There are various measures to prevent the injuries by making sure that the muscles and joints are properly warmed up, protective gears are used, using safety equipment, and doing proper cool-down exercises. The exercises should be done under the guidance of a trained and experienced physiotherapist.

Corresponding Author:
Anand S Chanagi
Government First Grade
College Harugeri, Tq Raibag,
Belagavi, Karnataka, India

Sports in which injuries occur most commonly are

Soccer/football, Tennis, Cricket, Hockey, Athletics. Though there are various other sports that also require physiotherapy treatment like Basketball, Volleyball, Rugby, Badminton, Cycling etc.

Muscle Strain

Muscle strain or pulled muscle is one of the most common sports injuries that often take place when a muscle is overstretched and gets torn. Muscle strains mainly affect the quadriceps, calves, quadriceps, groin, lower back, and shoulder.

Tendonitis

Inflammation of the tendon is referred to as tendonitis, associated with overuse, but can also be developed when a traumatic injury creates micro-tears in the muscle fibers.

Stress Fracture

Stress fractures are also a form of overuse injury. It takes place when the muscles are no longer able to absorb the pressure, thus resulting in a fracture. Stress fractures usually affect the lower legs and feet and women athletes are more prone to such injuries than men.

Contusions

Direct impact on the muscle causing injury is known as contusions. The faster the speed of the equipment that hits the player more severe the injury is resulting in swelling and bruising of the area. RICE is recommended for treatment, and medical assistance may be required for more severe contusions.

Whiplash injury

Whiplash injury can happen by an abrupt or unexpected backward or forward motion of the neck. Falling suddenly or getting hit causes the head to jerk and the neck gets strained. It occurs commonly in contact sports, causing pain, and numbness in the arms due to minor or major soft tissue damage to muscles and ligaments in the neck and vertebrae. The recovery of the player depends upon the severity of the injury.

Shoulder Impingement

Shoulder impingement occurs due to repetitive overhead movement during playing. These repetitive concentric and eccentric movements place demands to maintain high levels of muscular control, required to maintain the stability of the shoulder joint. Initial physiotherapy treatment for these conditions is rest, ice, and Kinesio-taping. To increase the flexibility of the muscles, ligaments, and tendons, range of motion and strengthening exercises are designed by the physiotherapist.

Acromioclavicular joint injury

The prevalence of shoulder injuries is high in hockey. The most commonly seen shoulder injury is Acromioclavicular (AC) joint injury, also known as a shoulder separation. This injury occurs due to direct contact hit into the shoulder. The severity can vary from a sprain to a complete tear of the involved ligaments.

Rotator cuff injury: The most common cause of a rotator cuff tear is repetitive microtrauma, which can occur over

some time. Bruising or swelling occurs due to repeated rotator cuff injury by pinching or straining, catching, or squeezing the rotator cuff tendons. Physiotherapist focuses on reducing inflammation and pain. The therapist recommends ROM exercises, isometric exercises, and capsular stretching, followed by isotonic exercises and aggressive pain-free strengthening.

Tennis elbow

Tennis elbow injury occurs to the tendons located on the outer side of the elbow, this overuse and overload occur from the serve and forehand stroke. Physiotherapy treatment for tennis elbow involves rest, ice and Kinesio-taping. A wrist brace or tennis elbow band can be used and special physiotherapy exercises for stretching and strengthening the muscles are beneficial.

Golfer's elbow

Golfer's elbow or medial epicondylitis is caused due to excessive use of topspin and due to overload on the backhand stroke-causing pain and inflammation. Physiotherapy treatment involves rest, ice, and Kinesio-taping. A wrist brace can be used, followed by stretching and strengthening exercises.

Wrist strain

Falling on an outstretched arm includes wrist sprains, wrist fractures, and shoulder dislocations. It can occur when the wrist moves in an abnormal position, suddenly twist, bends backward, or sustains heavy impact. The player feels tenderness, warmth, popping or tearing sounds, and difficulty in moving the wrist.

Carpal tunnel syndrome

These injuries occur due to the laid-back grip, rotation of the palm upward, and quickly turning the wrist to perform the topspin. Treatment for these conditions involves rest, ice, Kinesio-taping and range of motion, and strengthening exercises.

Lower Back pain

Players suffer from low back pain due to the fast weight transfers, jumping, and twisting, resulting in repeated flexion, extension, rotation, and lateral flexion of the spine commonly required during cocking or loading phase of the tennis serve. The physiotherapist designs strengthening exercises for back and abdominal muscles to increase strength.

Abdominal side strain

Side strain occurs in the side of the body involving the Oblique muscle. Due to the forcible contraction of the muscle, the injury occurs on the opposite side of the bowling arm. Side strains also occur because of repetitive arm action. The player feels pain and tenderness associated with internal swelling. Treatment requires adequate rest.

Femoroacetabular impingement

Femoroacetabular impingement can occur due to the multidirectional movement pattern, loading and abruptly starting, cutting, twisting, and stopping. This form of hip injury can be treated with the help of RICE and physiotherapy sessions under the guidance of a physiotherapist.

Groin pull

Groin pull occurs as a result of a pull or stretch of the muscles of the inner thigh. The player feels pain and tenderness in the groin and the inside of the thigh while raising the knee or while bringing the legs together.

Iliotibial Band Syndrome

Iliotibial band syndrome occurs due to an overuse injury along the outer thigh. Due to continuous friction created by the IT band along the outer side of the thigh, during running. The player feels pain and tenderness on the lateral or outer part of the thigh and knee just above the knee joint.

Hamstring strains

A hamstring strain is usually caused when the muscles become overloaded, leading to a strain, or a complete tear. Hamstrings are usually injured during sprinting i.e during fast bowling while fielding or running between wickets as a batsman. The player feels sudden or severe pain during exercise, pain or tightness while straightening or bending the leg, and weight-bearing. Physiotherapy treatment starts with RICE followed by progressive strengthening through exercise, soft tissue massage, scar tissue mobilization, dry needling, and taping.

Torn ACL

ACL or anterior cruciate ligament helps in keeping the knee joints together and brings stability. A Torn ACL is extremely painful and restricts the ability to walk. The injury takes place from a direct shot to the knees, or from incorrect landing and or stopping and changing direction quickly.

Torn MCL

It is another form of a knee injury, which takes place when the medial collateral ligament that connects the femur to the tibia is injured. It is caused when the knees are pushed sideways. This form of knee injury can be treated with help of ice compression, braces, and sports physical therapy sessions under the watchful eyes of a sports physiotherapist.

Patellofemoral pain syndrome

Patellofemoral pain syndrome or runner's knee is a condition in which the cartilage under the kneecap is damaged due to injury. It can occur due to strained tendons or misalignment in the knee. The player feels pain while exercising, bending the knee, climbing the stairs, squatting, and jumping. The player feels cracking or popping sounds in the knee while climbing stairs or after sitting for a longer duration with the knee bent.

Shin Splits

These affect the insides of the lower leg or shin area and are an overuse injury and also a common injury found among runners. Athletes having flat feet are more susceptible to this form of injury.

Pulled Calf Muscle

Pulled calf muscle injury occurs when any one of the muscles i.e gastrocnemius or soleus is pulled from the Achilles tendon. This occurs due to jumping or running. The player feels bruising, redness, and mild swelling, and is unable to stand on the ball of the foot.

Plantar Fasciitis

Plantar Fasciitis is the inflammation of the plantar fascia ligament that connects the heel to the front of the foot. Putting too much strain and stress are the major reason behind this form of injury and is usually treated with rest, ice, and stretching exercises.

Ankle Sprains

Medial ankle sprain can occur when the toes are turned out while the foot is flexed upward. Lateral ankle sprains can occur in soccer when a player kicks the ball with the top of their foot. Ankle sprains take place when the ligament that supports the joint gets overstretched due to incorrect stepping or stepping on an uneven surface or twists and rolls. Usually, ankle sprains heal with RICE – rest, ice, compression, and elevation.

Achilles tendon Rupture

Achilles tendon rupture occurs due to the partial or complete tear of the Achilles tendon. This can occur when a player performs a fast or jerky movement. Ankle sprains occur when the ligaments (surrounding the ankle joint) are stretched or torn.

Achilles tendonitis

Achilles tendonitis is the inflammation of the lower back of the leg just above the heel. Achilles tendonitis injury occurs as a result of overuse. Players perform sudden and repetitive movements that may eventually cause this injury over time. Physical activity worsens the pain and is usually treated with some rest, ice, stretching, and strengthening exercises. Depending on the kind of injury, it takes a number of weeks or months for one to recover completely. A physiotherapist helps one with gentle exercises that stimulates the tissues and muscles of the injury for the restoration of complete physical movement prior to the injury level. The physiotherapists gradually introduce various stretching and strengthening exercises with the reduction of pain. Sports physiotherapists offer customized recovery programs as per the type of injury, so as to better facilitate the entire recovery process.

How Sports Physiotherapy Can Help You Get Back to Your Game Faster

Injuries are an unfortunate part of any athlete's life. Whether you're a professional or a weekend warrior, getting back to your game swiftly and safely is crucial. This is where sports physiotherapy in Gurgaon plays a vital role. It focuses on the assessment, treatment, and prevention of sports-related injuries, helping athletes recover efficiently and regain their peak performance.

Understanding Sports Physiotherapy

Sports physiotherapy is a specialized branch that addresses the unique needs of athletes. It combines knowledge of physical therapy with an understanding of sports science, biomechanics, and exercise physiology. Sports physiotherapists are trained to treat a variety of injuries, from sprains and strains to more complex musculoskeletal problems.

Key Benefits of Sports Physiotherapy

Personalized Treatment Plans: Each athlete has different needs based on their sport, injury, and overall fitness level.

A sports physiotherapist will assess your condition and create a tailored rehabilitation plan to promote effective healing and recovery.

Faster Recovery: With targeted therapies and exercises, sports physiotherapy can significantly reduce recovery time. By addressing the root cause of your injury and promoting proper healing techniques, physiotherapy helps you return to your sport more quickly.

Pain Management: Many athletes experience pain during recovery. Sports physiotherapists use various modalities such as manual therapy, ultrasound, and electrical stimulation to alleviate pain and discomfort, making the recovery process smoother.

Preventing Future Injuries: A crucial aspect of sports physiotherapy is injury prevention. By identifying movement patterns and weaknesses that may lead to injuries, physiotherapists can educate athletes on proper techniques and exercises to strengthen vulnerable areas.

Enhanced Performance: Beyond recovery, sports physiotherapy can help athletes improve their performance. By focusing on flexibility, strength, and endurance through tailored exercise programs, athletes can enhance their skills and overall game performance.

Finding the Right Sports Physiotherapist in Gurgaon

Choosing the best physiotherapist in Gurgaon is crucial for effective recovery from sports injuries. Look for a professional with relevant qualifications, experience in treating athletes, and a strong understanding of sports-specific demands. Read reviews and seek recommendations to ensure they have a proven track record. A good physiotherapist will provide personalized treatment plans, foster open communication, and focus on both rehabilitation and performance enhancement to help you return to your game swiftly.

What is Sports Physiotherapy?

Sports physiotherapy simply means physiotherapy programmes that are solely designed for professional players, seasoned players, and people involved in any kind of activity. This programme allows the players to play with more energy, strength, and flexibility. Reduces the chances of injuries and minimises the risk of involvement in accidents.

If athletes have any kind of ongoing musculoskeletal problem, then sports physiotherapy can be a great help and fix the situation without any kind of operation or surgery.

Take a glimpse at the types or approach of sports physiotherapy treatments available in our clinic

Sports injuries are common in sports fields, but giving up on the game is not in the dictionary of players. But you might be wondering what possible physiotherapy techniques are available that you may need during the sports injuries. Let's understand one by one:

Manual therapy

This practice involves massage, manipulation of the joints, and joint mobilisation. Manual therapy requires hands-on

techniques that physiotherapists use as per their expertise and experience.

Therapeutic exercise

Therapeutic exercises include strengthening, stretching, and cardiovascular joints, and this programme is designed to increase endurance, flexibility, and proper functioning of the bones and joints.

Electrotherapy

Electrotherapy is a form of therapy that uses electrical apparatus to lessen pain, stimulate nerves, and accelerate tissue healing. Some of the renowned electrotherapies are electrical muscle stimulation (EMS), TENS, and ultrasound therapy.

Heat therapy

The heat therapy method includes hot packs, warm towels, and infrared lamps. In heat therapy, there is an involvement of heat to relax muscles, improve blood circulation, and reduce pain in the muscles, bones, and joints.

Cold therapy

As our muscles and joints get older, numbness in the muscles and joints occurs. To deal with this issue, cold therapy becomes a lifesaver and reduces inflammation, numbness, and swelling. Some of the cold therapy involves ice packs, ice baths, and cryotherapy.

Ultrasound therapy

Ultrasound is a radiation therapy that involves a beam of light that penetrates into the skin and targets the pain-causing region. This avoids pain, minimises inflammation, and also provides relief from the persistent pain of the bones and joints.

Joint traction

Joint traction is a kind of technique that brings tension to the joints and bones and separates the joint surfaces to alleviate the pressure and issues.

Cupping therapy

This is suction therapy, which involves the use of a vacuum to create pressure between the surfaces of the skin. Cupping therapy involves a cup-like vessel for proper circulation, tissue recovery, and reduced muscle tension.

Gait analysis

Gait analysis involves the assessment of the abnormalities in their walking and sitting patterns. In the majority of cases, the lack of ergonomics is a common reason for the pain in bones and joints. The physiotherapist educates the patient on the right walk, sit, and sleeping pattern to avoid any kind of sprain or strain in the bones and joints.

The above-mentioned are some of the physiotherapy treatment options that may change the journey of your game. These physiotherapy treatments will eliminate the pain and help you make a prompt recovery after injuries. With the assistance of the best physiotherapy team, a player can bring their best game to the field. A right physiotherapist will bring flexibility and endurance and open up possibilities for activities.

What are the three approaches used by physiotherapists to treat sports injuries?

In order to treat injuries, it is crucial to follow a proper recovery, strengthening, and healing strategy to avoid any kind of problem in the future. Here are the three approaches that physiotherapists follow to treat sports injuries:

Education and advice

Education and advice play a vital role in educating patients about posture, pain management strategies, lifestyle and activity, return-to-sport guidance, and training guidance. The expert physiotherapist helps you in every possible manner to make you stronger enough to deal with challenges in sports and also strengthen every body part.

Movement and exercise

Once the problem and situation were diagnosed, the physiotherapist left no stone unturned to bring the same balance to life. They designed the best exercise and activity plan to bring flexibility and endurance to the bones and joints. Movement and exercise involve cardiovascular activity, functional training, and balance.

Manual therapy

Manual therapy involves hands-on techniques or the involvement of hands in the treatment. This therapy combines massage, electrotherapy, and taping and bracing for sports optimisation.

Wrapping Up

For a sports person, this could be a nightmare for their whole life if they left the field. They breathe through sports, and their life is about bringing their 100% every day to the field. During sports, injuries are common, and balancing the stamina and endurance of the bones and joints is also important every day. In this whole journey of a player, a sports physiotherapist comes up as a rescuer. From mobility issues to strength, they help you in every step and push you forward in any kind of game.

What is Sports Physiotherapy?

Sports physiotherapy is a specialized branch of physiotherapy focused on the treatment and prevention of injuries related to sports and exercise. Unlike general physiotherapy, sports physiotherapy involves tailored approaches to enhance athletic performance, aid in recovery from sports-related injuries, and prevent future injuries. The main goal is to get athletes back to their peak performance levels safely and effectively.

Role of Physiotherapy in Sports

The major goals of physiotherapy and rehabilitation in sports injury include:

1. Planning exercise regimes to help return the athlete to pre-injury function at functional site
2. A personalized exercise prescription is used to improve mobility restrictions.
3. Preventive Injury methods and diagnosis for athletes thorough screening process and exercise
4. Helps achieve peak athletic performance.
5. Monitoring of athletes.

Modalities used in Sports Medicine by Physiotherapists:

The goal of the center is to improve your daily comfort with

rehabilitation, preventative care, and non-invasive treatments by the following modalities:

- **Ice pack applications:** Icing could be immensely helpful in minimizing the swelling and pain caused by the injury and is used by physiotherapists as the starting point when treating an injury.
- **Hot pack applications:** If the injury does not come with swelling, using a hot pack that is wrapped in a towel is the common procedure for many physiotherapists – as one that is effective in alleviating pain and joint or muscle stiffness.
- **TENS:** Also known as Transcutaneous Electrical Nerve Stimulator, this small battery-operated device directs little amounts of current into the skin or just over the injury, effective for temporary pain relief.
- **Ultrasound:** Driving sound vibrations directly into the tissues, this procedure can heat bulky body areas and help the healing process.
- **Massage and stretching:** Both standard techniques in physiotherapy for loosening the muscles or relaxing them while reducing the tissue adhesions and decreasing the swelling.
- **Range of motion:** The ROM exercises help improve and maintain the joint's range of motion.
- **Strengthening exercises:** Weak muscles result from inactivity after an injury, and strengthening exercises are a great way to bulk, repair, and maintain the strength of your muscles.
- **Kinesiology Taping:** Or strapping is a technique used by physiotherapists for injury prevention or rehabilitation.

Conclusion

Injuries can be a significant setback for any athlete, but sports physiotherapy is the key to a faster and safer recovery. By working with the best physiotherapist in Gurgaon, you can benefit from personalized treatment plans designed to address your specific needs. Their expertise will not only help you recover quickly but also enhance your overall performance and prevent future injuries, ensuring you return to the game stronger than ever. In the physiotherapy clinic, the team of sports physiotherapists developed a well-designed program that includes manual training, education, and tailored exercise and movements to improve the game of the athlete. Along with that, they help the athlete with prompt recovery and minimize the risk of injuries. More or less sports injuries treatment involves sports physical therapy along with proper medication to bring relief to the athletes. In fact, physiotherapy in sports injury has proven to be quite useful in the rapid recovery of athletes and is one of the most trusted forms of treatment.

Most of the physiotherapy centers do offer help in tackling different cardiopulmonary issues. They do work on ways to improve the breathing and endurance levels of athletes that enable them to perform their day-to-day activities in a better way. Most sports therapists do offer benefits when it comes to spinal cord injury treatment, several sclerosis, neurological disorders, etc. Sports physiotherapists do have the right equipment and knowledge to help in addressing persistent, severe, and overuse injuries. They do play an important role in any sports person's performance and health.

References

1. Smith GN. Sports Physiotherapy. *Physiotherapy*. 1998 Nov;84(11):572-573.
2. Ushotanefe U, Mbajiogu FE, Sanya AO. Physiotherapy utilisation by sports physicians for musculoskeletal injuries in selected elite sports in Nigeria. *South Afr J Physiother*. 2000 Aug 31;56(3):19-23.
3. Sharma S. Cryotherapy in Sports Physiotherapy: An Update. *Physiother Occup Ther J*. 2017;10(1):43-46.
4. Standeven H. Physiotherapy in Sport. *Physiotherapy*. 1989 Oct;75(10):561.
5. Ashton H. Sports physiotherapy advancing in New Zealand. *Br J Sports Med*. 2015 Jul;49(14):903.
6. Babu AS, Veluswamy SK, Rao PT, Maiya AG. Clinical Trial Registration in Physical Therapy Journals: A Cross-Sectional Study. *Phys Ther*. 2014 Jan 1;94(1):83-90.
7. Bulley C, Donaghy M. Sports physiotherapy standards: A minimum threshold of performance. *Phys Ther Sport*. 2005 Dec, 6(4).
8. Jarratt B. Celebrating sports physiotherapy specialist: kudos Jacinta Horan (SEPNZ). *Br J Sports Med*. 2020 Feb 17;54(5):255.
9. Booth L. Physiotherapy report. *Br J Sports Med*. 1997 Mar 1;31(1):80-81.