



Golden Hills

Orthopedic and Sports Physical Therapy

j o u r n a l

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Our Mission...

To further the prevention, diagnosis and treatment of movement dysfunction in order to enhance the physical health and functional abilities of our patients.

To maximize the patient's potential for regaining full physical health by providing rehabilitation through the use of advancements in physical therapy techniques and state-of-the-art equipment.

To establish a self-management program for the patient through education and a personalized home exercise program for each individual to enable the patient to maintain their physical health at home and at work.

Series Introduction: **Sports, Recreation and Exercise (SRE) Activities**

At Golden Hills Orthopedic and Sports Physical Therapy, we are advocates for total patient health. Not only do we work with our community of referring physicians to treat patient injuries when they occur, but we also help the patient develop proper stretching and conditioning programs to avoid injury and enhance performance. In addition, we actively promote physical activity as a way for patients to maintain a healthy lifestyle, create work-life or school-life balance, and forge valuable relationships.

With this commitment in mind, we will be launching a new series in 2008 targeting specific sports, recreation and exercise (SRE) activities. In each issue, we will discuss:

- The most common causes of injury for a particular activity
- Strategies to avoid injury and enhance performance
- Targeted treatment and rehabilitation programs to promote patient recovery when an injury occurs

Our goal is to help you and your patients understand the risks inherent in certain activities as well as the wide range of physical therapy services available to patients for who engage in all types of SRE activities.

In the November and December issues we will review general information

about SRE activities, some of which we covered in our February through April 2006 issues of *Golden Hills Journal*. Beginning with the January 2008 issue, you can look forward to in-depth discussion of a new SRE activity each month!

SRE-Related Injuries in Perspective

While participating in SRE activities is an important part of any healthy lifestyle, these activities can carry risks that patients should be aware of. Each year, an estimated 30 million American children and adolescents and 150 million adults participate in some kind of nonwork-related physical activity. While there are relatively few mortalities associated with SRE-related injuries, more than 10,000 Americans receive treatment each day in emergency departments for injuries sustained during SRE activities, and one in five emergency department visits for an injury result from participation in sports or recreation. That's over 4 million SRE-related injuries annually. In addition, such injuries are, ironically, a leading reason people stop participating in potentially beneficial physical activity.

Risk of SRE-related injury varies by many factors, including specific activity and participant age. Children younger than 15 account for 25 percent of all drownings and about 40 percent of all SRE-related emergency department visits. They may be at risk because

Sports, Recreation and Exercise (SRE) Activities (Continued)

of immature or undeveloped coordination, skills and perception. Adolescents and young adults under age 25 have high participation rates in SRE activities and experience almost one-third of all SRE-related injuries. The population of older adults is increasing, and little is known about their injury risk during participation in SRE. In 1996, emergency departments treated more than 53,000 SRE-related injuries among people 65 and older, a 54% increase from 1990.

SRE-Related Injuries Defined

SRE-related injuries are injuries that typically occur while the patient is participating in an organized sports activity, a strength and/or aerobic training and conditioning program, or some other type of recreational fitness activity. Injuries may occur for a variety of reasons, including muscle or joint fatigue, improper training or form, movement imbalance syndrome, and lack of appropriate footwear or safety equipment.

There are two general types of activity-related injury: acute traumatic injury and overuse injury, often referred to as “repetitive stress” injury.

Acute Traumatic Injuries

Acute traumatic injuries usually involve a single blow from a single application of force, such as receiving a cross-body block in football. Acute traumatic injuries may include the following:

- **Fracture** - a crack, break, or shattering of a bone
- **Contusion** - a bruise caused by a direct blow, which may cause

swelling and bleeding in muscles and other body tissues

- **Strain** - a stretch or tear of a muscle or tendon
- **Sprain** - a stretch or tear of a ligament
- **Abrasion** - a scrape
- **Laceration** - a cut in the skin that is usually deep enough to require stitches

Overuse Injuries

Overuse injuries are injuries that happen over a period of time. They are usually the result of repetitive training, such as running, overhand throwing or serving a ball in tennis. They may include the following:

- **Stress fracture** - tiny cracks in the bone’s surface caused by repetitive overloading (such as in the feet of a basketball player who is continually jumping and landing on a hard surface)
- **Tendonitis** - inflammation of the tendon caused by repetitive stretching or movement
- **Epiphysitis** or **apophysitis** - growth plate overload injuries such as Osgood-Schlatter disease

Overuse injuries may seem less problematic than acute injuries. The patient may be tempted to ignore an ache in his or her wrist or soreness in the knees, but if left untreated an overuse injury has a high probability of getting worse over time and can cause serious medical complications.

In next month’s issue we will continue our review of basic SRE-related injury concepts. When we

get into discussions of specific activities in 2008, you can look forward to information about the most common injuries associated with that activity, as well as beneficial training and conditioning programs geared toward enhancing performance in that activity, patient tips on stretching, equipment and general safety, and a summary of Golden Hills’ approach to treating activity-related injuries.

If you have any questions about how Golden Hills can assist your patients in maximizing their experience with an SRE activity, or about specific injury treatment modalities, we encourage you to contact us today at (408) 274-0888, or therapy@goldenhillspt.com.

Physician Tips

Diagnosing SRE-Related Injuries: What to Look For

Acute Injuries

- Sudden, severe pain and swelling
- Inability to place weight on a lower limb
- Extreme tenderness in an upper limb
- Inability to move a joint through its full range of motion
- Extreme limb weakness
- Visible dislocation or break of a bone

Overuse Injuries

- Pain when performing an activity
- A dull ache when at rest
- Swelling