

Pain Diagnostics and
Interventional Care

301 Ohio River Blvd
Sewickley PA, 15143
Phone number: 412-221-7640

Exciting News!

As of April 22, 2023, Dr. Provenzano is officially the President of the American Society of Regional Anesthesia and Pain Medicine (ASRA Pain Medicine). ASRA Pain Medicine is the largest anesthesiology subspecialty society in the United States. Congratulations to Dr. Provenzano!

At the same ASRA Pain Medicine meeting where Dr. Provenzano was inaugurated as President, our Clinical Research Coordinator, Cecilia, presented her abstract E-poster for a case report!



Medical Advice Disclaimer

The information, including but not limited to, text, graphics, images, and other material contained on the newsletter are for informational purposes only. No material is intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified healthcare provider with any questions you may have or prior to beginning an exercise program.



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Pain and Summer Sports

Background

With the warm weather, patients often dive right back into their favorite sports, such as **golf, tennis, and cycling**. Although physical activity is encouraged and necessary for a healthy lifestyle, one should remain cognizant on how their favorite activities can affect their low back and joint pain. Although golf, cycling, or a friendly game of tennis are often thought of as low-to-moderate aerobic intensity past times, injuries are common when one

lacks the appropriate core or paraspinal musculature strength. Research indicates that improper loading of the spinal structures during rotational sports may increase the risk of overuse injuries and disc herniations. Continue reading below for more information on how to protect your back while participating in your favorite past times this summer!



Benefits of Summer Sports



Physical activity through sports is a wonderful way to keep healthy and have fun. Research studies have linked regular golf playing with improvements in known risk factors for cardiovascular disease. For example, improvements occur in body composition (BMI), lung function, and blood circulation. Improving circulation and lung function aids in optimal functioning of the heart. A golf swing also exercises the core and upper body, which requires stability and balance, both of which are vital in older populations for preventing dangerous falls.

Swimming is an excellent way to get regular aerobic physical activity and improve overall health. Water-based exercise can help those struggling with arthritis improve motion and use of their arthritic joints without exacerbating their symptoms. Swimming has also been shown to improve mood and

decrease anxiety in both men and women. For post-menopausal women, swimming or water aerobics may improve or help maintain bone health.

Previous studies have shown that those who play tennis recreationally have lower body fat percentages, more favorable lipid profiles, and significantly better aerobic fitness. These results are true for those that have played tennis for life, or those who take on the sport in adulthood.

In general, playing sports has also been demonstrated to improve blood insulin-glucose balance. As muscles contract, there is increased blood glucose uptake by muscle cells as they use the glucose for energy.

Why you Should Consider Pickleball as a Low-Impact, High Activity Pastime:

1. Pickleball is an excellent way to improve your long-term cardiovascular health.
2. The smaller court results in less running and fewer sudden stops and starts, decreasing your risk of injury.
3. The paddle is light and without strings, reducing the exertion and resistance faced by your arms, wrists, shoulders, and thoracic region.
4. The pickleball is hollow and light, limiting the impact faced placed on the shoulders and trunk.
5. Serving and hits often come from an underhand motion, meaning the strain and rotational forces applied to your back and trunk are significantly reduced.



Mission Statement

To professionally and passionately provide evidence-based medical care for patients with various pain states and to advance the science of pain medicine through research and education.

Contact us!



Phone: 412-221-7640

Fax: 412-490-9850

Injuries Associated with Summer Sports

Overuse injuries are the most common injuries experienced by golfers. Ligaments, discs, tendons, muscles, and bones have a certain level of plasticity that allows these tissues to adapt to repeated movements or loads. However, if environmental stressors, such as repeated swinging or twisting, surpass plasticity limits, abnormal tissue stresses can lead to acute disc herniations or chronic injuries. Studies suggest that older golfers are more susceptible to back pain and acute injuries due to their decreased spinal mobility and limited ability to absorb forces applied to the spine.

Tennis is a low impact, but highly aerobic sport that is an excellent pastime and way to improve cardiovascular health. However, patients should be cognizant that tennis players, even amateurs or hobbyists, are at an elevated risk of hyperextension, lumbar

disc, and rotational injuries. Hyperextension of the low back also stresses the facet joints, discs, muscles, and ligaments around the lumbar spine. This stress can lead to soft tissue injuries.

Like tennis, swimming is a wonderful aerobic exercise that can be an excellent alternative to jogging. However, the repetitive rotation in the lower hips can contribute to strain on the discs and facet joints.

Scan the QR code or click the links below for access to informational newsletters!



SI Joint
Pain



Disc
Herniation



Joint
Arthritis

SI Joint: <https://tinyurl.com/sijointpain>

Disc Herniation: <https://tinyurl.com/DegenDisc>

Arthritis: <https://tinyurl.com/JointArthritis>

How to Protect Your Body

In short, though there is no way to guarantee that a back injury or aggravation of pre-existing back pain will not occur during a sport, there are a number of ways to protect yourself while enjoying the sports you love.

We recognize that not everyone has the resources to work with a golf professional to learn proper golf techniques. However physical therapists often offer "swing screenings" to help you maximize your swing with decreased risk of rotational injury. Additionally, we encourage you to prioritize your spine's stability and mobility through stretching and strengthening exercises.

Preventing back injuries in tennis due to rotation, flexion, and extension typically relies on correct posture and maintaining proper stability and flexibility in the trunk and low back. First, always stretch before a tennis match and pay particular attention to the trunk, hips, pelvis, shoulders, and low back. Secondly, prioritize the mobility and stability of your low back

and pelvis. Building up strength in your abdominal and back muscles will protect your facets and intervertebral discs from the excess strain caused by repetitive rotation and flexion/extension. Please, ask your healthcare providers for guidance on finding the perfect routine for you!

For swimming, it is recommended to start with water therapy. Water therapy is an exercise program that teaches proper mechanics and helps you determine what work out intensity is best for you. You and your back will also benefit from the gentle resistance and increased range of motion during exercise. The best way to avoid a nagging low back injury in swimming is through a preventative approach. Prior to swimming, ensure that you have properly stretched your back, hips, and pelvis.

