TORTICOLLIS IN INFANTS

By: Molly Alfermann, DPT, CSCS – SSM Physical Therapy

Torticollis is a postural deformity of the neck that is visible by an infant’s head sidebending toward one side with rotation toward the opposite side. It is caused by a dysfunction of the sternocleidomastoid (SCM). Torticollis is named by the direction in which the infant’s head is tilted and can be accompanied by flattening of the infant’s head or face, and facial asymmetry with forward ear, forehead and cheek.¹

Conservative treatment has been found to be most successful when beginning therapy at less than 2-8 months of age. Best outcomes are achieved with earlier diagnosis and intervention. A knowledgeable physical therapist will be able to access an infant and provide many suggestions and tips to help correct torticollis. The goals when working with these patients include achieving symmetrical head positioning, normalizing active and passive cervical range of motion (ROM), preventing flattening of the head, correcting muscle imbalances around the neck and improving activity participation in age appropriate developmental milestones. Treatment sessions typically include passive stretching and soft tissue mobilization performed by the therapist, active ROM, active participation in developmental milestones including tummy time, rolling and all fours positioning and parent or caregiver education on stretching and active participation in age appropriate milestones.¹,²

A few simple tips for prevention and treatment include alternating direction in which the infant has to turn their head for feeding. When in the car seat, a towel roll can be used to address head position so the infant’s head is centered without tilting. Tummy time is vital for development of neck control and strength. Most infants do not like to be on their tummy, so frequent short bouts of time may be more successful. When placing the infant on their back for sleeping, overhead mobiles should be centered so midline position is maintained.


preadolescent knee pain

By: Patricia Welch, P.T., DPT – Baylor Institute for Rehabilitation

Research has shown knee pain affects 33 percent of all adolescents, and an even higher prevalence amongst adolescent athletes.¹ Pediatric knee pain is sometimes considered part of the growing process and will go untreated. However, studies have shown that between 33 and 50 percent of kids with untreated knee pain were still hurting one year later.¹ Yearly, there are 2.5 million sports-related injuries in the ER and knee surgeries alone account for 60 percent of all sports-related surgeries.² With kids specializing in one competitive sport, repetitive physical demands can lead to overuse injuries.

Osgood-Schlatter’s disease is a common cause of adolescent knee pain during growth spurts, with a higher risk in young athletes. In active children, the quadriceps pull on the patellar tendon which connects to the tibial tubercle. This causes inflammation of the underlying growth plate in children. Although rest is a common treatment, physical therapy can help speed up the recovery process and prevent pain from coming back after returning to sports with appropriate stretching and strengthening.

Research has shown patellar disorders to be the most common knee complaint among adolescents, and when untreated became a chronic problem.³ Patellofemoral pain can present very similar to Osgood-Schlatter’s. It has been found that shortened quadriceps muscle, altered vastus medialis muscle response time, decreased explosive strength and hypermobile patella all had significant correlation with
Patellofemoral pain in adolescents. All of these deficits listed are commonly referred to as muscle imbalance and can be properly evaluated and treated with physical therapy.

Muscle imbalances can also occur in the younger sedentary population. Decreased physical exercise and recess time in schools combined with technology advancements have increased the amount of time students are sitting. This can cause tightness in hip flexors, including the quadriceps. If students are sitting in a slouched posture, this also causes shortened hamstrings. Decrease in physical activity contributes to muscle weakness which not only causes knee pain, but also puts them at higher risk for knee injuries to occur.

Although there is a high rate of knee injuries in adolescent sports, the positive health benefits of a physically active lifestyle outweigh the risk of injury. Physical therapy should not only be utilized for treatment of knee pain, but also prevention. Injury prevention, such as muscle strengthening and movement training, should be used to decrease the rate and severity of knee pain occurring.


AVOID INJURY DURING RETURN TO SUMMER SPORTS

By: Ron Arzt, DPT, CSCS – Kessler Rehabilitation Center

With summer just around the corner, many young athletes are looking forward to warmer weather and returning to their favorite outdoor sports and recreational activities. But after a long, sedentary winter, jumping back into action can lead to muscle strains, ligament tears and other injuries.

Preparation is key. Many athletes overlook the needed preparation the body requires and get right into the game, increasing the risk of injury. However, by incorporating strength and cardiovascular training, individuals can help to decrease the likelihood of injury.

A basic warm-up that includes basic stretching or light jogging or walking will help prepare the body and reduce the possibility of injury. In addition, yoga or Pilates can help to improve balance, core strength and general spine conditioning. Regardless of the sport, athletes should learn to listen to their bodies and know their limits. Some may have to modify their game and tone down their “inner competitiveness” to engage in play more safely.

Being able to recognize the difference between pain and muscle soreness is also important. Playing through pain can result in micro trauma; seemingly minor injuries often related to overuse or repetitive stress that can lead to more serious problems and require medical attention. Conversely, muscle soreness is a common reaction to exercise and generally responds to rest. Studies show that proper nutrition and hydration can also aide in muscle recovery.

Another tip is to engage in more than just one activity/sport, as this will decrease the risk of developing an overuse or repetitive stress injury and allow the body to recover more easily and reduce the chance of boredom.

Physical therapists play a vital role in helping individuals recover from an injury through hands-on therapy, exercise, modalities including heat and ice, electric stimulation and ultrasound and other non-invasive treatment options. Ask your doctor about physical therapy today!

For more information or should you have any questions regarding the subjects within this newsletter, please contact JVOutpatientTopics@selectmedical.com today. Thank you!