Common Causes of Poor Posture and Their Solutions

By Michael J. Mullin, ATC, PTA

1) CAUSE:

Forgetfulness—Let’s face it, the main reason most people cannot maintain good posture is forgetfulness. Unless someone is in pain and is able to use that as their reminder, people just do not think of it often enough.

SOLUTION:

Use a Reminder—Pick something that you think of regularly during the day—your spouse, your children, driving, every time the phone rings—and use that as your “alarm clock” to remind yourself to correct your posture. The more often good posture is practiced, the easier it is to maintain, the more natural and comfortable it feels—and it makes up for the times which you forget.

2) CAUSE:

Lack of Understanding—Most people do not truly have a thorough understanding of proper postural positioning. They view it as a ”military-style” posture by thrusting their shoulders back, or straighten up through their mid-back and forget the head and neck..

SOLUTION:

Use Your Deep Abdominals—The key to proper posture is having a good understanding of what to tighten through the abdominals. You need to think about your deepest abdominal muscle (transversus abdominus) which is activated by drawing in on your bellybutton. This muscle functions much like a corset in that as it draws in, it stabilizes your pelvis, spine and internal organs. It also facilitates your back stabilizer muscles (multifidi) which function much like an automatic tension reliever.

3) CAUSE:

Work—Whether the job is at a desk, performing manual labor, traveling long distances, or performing surgery, it all takes its toll on our bodies. We have a tendency to tighten up into positions which we are regularly in and this eventually causes a breakdown somewhere along that chain.

SOLUTION:

Change Your Ergonomics—Both physically and structurally. Physically by modifying your work environment to be more movement friendly, and structurally by the way the tasks are performed. Whatever the job is that you do, you need to think of putting yourself in the optimal position to perform the task. Desk and keyboard height, repetitious tasks, and heavy lifting all need to be evaluated to make sure that the work station and environment do not predispose or exacerbate injuries.

4) CAUSE:

Deconditioned—With today’s hectic world and pace, people have been finding it increasingly difficult to maintain some form of regular exercise. This not only prevents the release of the much needed stress-relieving endorphins, but it also contributes to weakening of the muscles, bones and joints of the body and reducing the amount of good synovial fluid into the intervertebral discs.

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Bracing After ACL Reconstruction

By Danielle Parent

Standing on the sidelines of a football game one sunny Saturday afternoon, I watched as one of the boys jumped to avoid a tackle, and landed on his left foot, then his right followed. As he went to turn and keep running towards the end zone, he fell and stayed down. Now it was my turn to enter the field. Once I reached this player, my heart sank because he was holding his knee. I asked what had happened, and he simply replied “I tore my ACL again. I’m walking off.” He was helped to his feet and assisted off of the field by his teammates. He was tested on the sidelines by the certified Athletic Trainer, and also by the Physical Therapist that was there, and the injury was diagnosed as an ACL tear. Later that week, his MRI confirmed it.

After all of the rehabilitation this athlete went through last year for the same injury, it was difficult to keep him positive about his surgery and future outcomes. His main concern was being hurt again. One of his major anxieties was that he doubted his brace since it was custom made which is supposed to prevent re-injury. This sparked a conversation between the athlete and I on the effectiveness of bracing after ACL reconstruction, and also prompted research on studies that have been done on this topic.

Review of the literature suggests that bracing is just as effective as no-brace when preventing re-injury physically, that bracing may hinder performance objectively, but that bracing benefits the patient mentally as confirmed by subjective findings. (Wu, 2001, 284)

In Wu’s study, it was found that bracing slowed running and turning, and that protection isn’t offered in high-loading activities such as sports. This study tested three groups (DonJoy Legend brace, no brace, and a mechanical placebo) to verify the effectiveness of either the mechanical restraints of the brace or other factors involved. In conclusion to their research, it was stated that “based on [the] findings, there was no justification to suggest that an ACL brace could improve functional performance.” (Wu, 2001, 284).

Birmingham et al. further supported this claim in saying that “it is possible that increased sensory motor activity experienced during these more challenging tasks minimized any benefit from the brace. Although the brace may have provided knee proprioceptive cues, its contribution may have been minor compared with the somatosensory information already available.” (Birmingham, 2001, 1257) The final stance on this study is that subtle changes in the proprioception may have a small correlation with weight-bearing activities, but that mid-air positioning could possibly benefit from increased proprioception with bracing, and thus affect landing. There does not seem to be any protection against closed-chain or non-
Maine Athletic Training Student Symposium
University of Maine at Presque Isle

by Heather Laferriere

Athletic training students in Maine look forward to the Student Symposium each year. We get a chance to visit another program’s facility, meet with students from the various schools, discuss what we see at our clinical sites, and of course learn new information. On November 14th, we were able to take the trek north to the University of Maine Presque Isle for the Environmental Illness and Endurance Athletes Student Symposium. It was a long, rainy, five and a half hour drive for most of us and we were anxious to get started. We arrived on Friday night, grabbed some dinner in town, and then met up at Gentile Hall on the UMPI Campus. The facility was amazing. We were given a brief tour and demonstration of the treadmill testing center, and then we were able to swim, play basketball and badminton, use the climbing wall, and catch up with other students who we hadn’t seen in a while.

When Saturday rolled around, we knew it was going to be a soggy day. We left the hotel prepared for the elements and headed to the Nordic Heritage Ski Center. We were welcomed by the students and faculty of the UMPI Athletic Training Program. The event started with information sessions on heat illnesses, cold related illnesses, and wilderness evacuation techniques and precautions. Information on heat rash, heat syncope, heat cramps, and exertional heat exhaustion was presented, as well as information on exertional hyponatremia. Prevention techniques were discussed for these illnesses, as well as how to identify athletes who are at high risk. The use of sports drinks was reviewed and we were able to experiment with various smoothie recipes. Diagnosis and treatment information was presented on hypothermia, Raynaud’s syndrome, frostbite, and cold-induced bronchospasm. Wind chill was also discussed, and we learned how to adjust the actual temperature to take the wind chill into account. Along with this, we learned effective layer habits for outdoor activity in the cold. For those of us who were not too familiar with what goes where, we were provided with samples of clothing from each layer. We even had relay races to see who could dress the most appropriately for certain scenarios. For the wilderness emergency care, we were able to head outside and do some practical work. Emergency medicine in the wilderness is similar in many ways to what we would experience as athletic trainers, however due to the fact that help is not easily accessible, many other aspects must be considered. Long-term care must be provided because it could be hours before emergency help can arrive. Environmental concerns must be taken into account to ensure that no additional conditions occur. After the brief presentation, we were able to ‘rescue’ each other from the woods, putting to use our knowledge of patient transport and improvising with the equipment we were provided with. We decrumpled each other from the wooded areas and took turns lifting and transporting each other.

Following a hearty lunch of chili and baked potatoes, the afternoon session began. We were given a brief overview of the biathlon event and gun safety, and then we were able to go outside and take turns firing the guns. This session also included a workshop on nutrition and hydration of the endurance athlete. Pre- and post- exercise nutrition was covered, as well as the 10 essential nutrients for endurance athletes, with emphasis on providing the athlete with optimal nutrition. Overall, the program was informative and fun. The presentations by the UMPI students allowed us to interact on a professional level. The information presented was very relevant to the conditions and illnesses we could treat as athletic training students in Maine.

Thanks to the students and faculty at the University of Maine at Presque Isle for a great day!
Poor Posture (continued from page 1)

SOLUTION:

Exercise—You are only as good in your personal and professional life as you feel. When the body does not get some form of regular exercise or activity, things just do not work as well. You never let your car go much more than a few days without running it, so why should you think that the body is any different. Any combination of home exercise programs, pool workouts, outdoor exercise, gym routines, yoga, or Pilates will work. Just make it consistent and focus on that deep abdominal muscle while performing.

5) CAUSE:

Anatomical—Some of us are born with, develop, or acquire physical conditions which make what would be considered good posture extremely difficult.

SOLUTION:

Treatment—There are a number of different quality practitioners such as physical therapists, physiatrists, and chiropractors, which can help to treat individual conditions. If the system is not functioning properly, forcing it will not help. The longer people wait to seek treatment or do not maintain their recommended routine, then the worse the condition will get.

Bracing (continued from page 2)

contact injuries. (Birmingham, 2001, 1257)

Studies done by Kartus et al, Risberg et al, and McDevitt et al. also indicate no difference in stability between braced and no-brace subjects. (Kartus, 1997, 157) (Risberg, 1999, 307-308) (McDevitt, 2005, 1890) It does not seem beneficial, after review of these studies, to brace a patient, except for the possible psychological support that it offers, and this may cause insurance companies to discontinue coverage of braces. It does, however, seem necessary to continue research in this area before that decision is made.

References:


