Ohio Wesleyan University– Athletic Training Athletic Training Newsletter

Spring 2011. Volume 1, Number 2

Introduction - by Todd Miller

There are a couple things that we, the Athletic Training Staff, have learned to expect every August and September: 1. Pre-Season Physicals, 2. the Selby Stadium ATR will be hot, 3. we will run out of ice, and 4. we will see **a lot** of student-athletes with Hamstring injuries. It doesn't seem to matter what sport, gender, position, traditional vs. non-traditional season; this injury seems to affect a higher number of students than it should. Check out the article below, covering how to prevent these injuries. Speaking of injury prevention, read Coach McGuffin's column on how to design and implement a thorough summer time strength program. What's new with Chartwells? Check out the diet meal plan put together by Daniel Magee, utilizing all of the dining outlets on campus. Need help with a paper or writing assignment? Martine Stephens outlines the resources available to you at the OWU Writing Center. I hope you enjoy, and let me know if you have any suggestions for future topics.

Hamstring Injuries - by the OWU Athletic Training Staff

Anatomy

The "Hamstring" muscle is actually a group of 3 muscles that lie on the back of your thigh. The muscles that make up the Hamstring are the Biceps Femoris, Semimembranosis, and the Semitendinosis. All of these muscles originate from the hip complex and insert on 2 different locations around the knee joint. Because they cross 2 joints they provide both hip extension and knee flexion.

Method of Injury

Hamstring strains often occur during an eccentric contraction (contraction while the muscle lengthens) of the hamstring muscle group as the athlete is running. Just before the foot hits the ground, the hamstrings will contract to slow the forward motion of the lower leg.

Other factors which may contribute to a hamstring injury include: Poor conditioning, flexibility, and/or muscle strength, muscle imbalance between the quadriceps and hamstring, muscle fatigue, improper or no warm-up, and prior hamstring injury.

Signs and Symptoms and Grades

A person who sustains a Hamstring strain will experience swelling, pain, immediate loss of function, and possibly discoloration. The amount of these signs and symptoms depends on the severity of the damage done to the muscle fibers. As is the case with most soft tissue injuries, Hamstring strains are graded as 1, 2, or 3; with grade 1 being mild and 3 being severe.

Management

As with any injury, we utilize the RICE principle (Rest, Ice, Compression, Elevation). Ice is the most important treatment you can do after injury. It decreases blood flow to the area, which decreases pain and swelling. Most of the pain and discomfort initially from Hamstring injuries is caused by muscle spasm, which is the body's response to protect itself from greater injury. Therefore, it is important to try and stop the muscle spasm. This can be done by performing isometric strengthening exercises (exercises where there is no change in muscle length), light stretching, and using electric modalities (the Sports Medicine staff will decide what the best course of action is for your injury). After the soreness has subsided, strengthening exercises can be introduced, with an emphasis on eccentric contractions (more commonly referred to as "negatives" in weight room). As you progress from these weight room exercise, perform agility, plyometric, and sports specific exercises with an emphasis on core/trunk stabilization. It is important that you do not return to activities too soon, as many hamstring injuries tend to become recurrent.

Prevention

There are a couple basic steps you can take to prevent these injuries. These include performing regular stretching and strengthening exercises, and completing conditioning activities over summer prior to returning to OWU. There are many different ways to stretch the hamstring. Pick 2-3 and perform them as part of your warm-up and cool down. It may also help to do them before going to

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Upcoming Dates:

- **Thursday, April 21st & Monday, April 25th**

Fall Sport Returner Student Athlete Physicals at the Student Wellness Center, Your coaches will contact you with more information.

- **Thursday, May 26th—Saturday May 28th**

NCAA Outdoor Track and Field Championships. If interested in volunteering, please contact Ashley Shaffer at **anshaffe@owu.edu**

Inside this issue:

What's New with Chartwell's? - by Dan Magee

In January 2011 Chartwells implemented "Balanced U". Balanced U is divided into three components an icon system to identify menu items, monthly subjects and stealth health. The icons (to the left) with a short explanation listed below:

Balanced – Foods limited in fat, calories, saturated fat, cholesterol and sodium.

Vegetarian – Foods that do not contain animal products, except eggs and dairy.

Vegan – Foods that do not contain any animal products including honey, eggs, and dairy.

Sustainable – Food purchased or produced in a sustainable manner. This may include cage-free eggs, sustainable seafood, reduced antibiotic chicken, organic and locally produced foods.

Feel free to contact me if you have any questions or suggestions- **djmagee@owu.edu**

Below is a menu of offering at various campus outlets highlights our healthy offerings.

		Day 1	Day 2	Day 3	Day 4	Day 5
Breakfast	**Location**	**Ham-Will**	**Science**	**Univ Hall**	**Ham-Will**	**Ham-Will**
	Item 1	Oatmeal/Fresh fruit	Bagel	Toasted English Muffin	Scrambled eggs	French Toast
	Item 2	Yogurt/Fresh fruit	Cereal / skim Milk	Fresh fruit	whole wheat toast	Yogurt/fresh fruit
	Item 3	Bagel/juice	Fresh fruit	coffee/ juice	Orange juice	Banana/coffee
Lunch	**Location**	**Smith**	**Thomson**	**Ham-Will**	**Science Cart**	**University Hall**
	Item 1	Baked Chicken	Outtakes Turkey Sandwich	Classic Curry Chicken	Outakes Chicken Caesar salad	Soup / Sandwich
	Item 2	Spinach Salad with Couscous	Pretzels	Basmati Pullao	Bagel	Muffin
	Item 3	Pasta with Marinara	Power Bar	Fresh mixed Vegetables	Fresh Fruit	Drink
	Item 4	Ice Cream or fresh fruit	Bottled water	Bombay Potatoes	Coke	
Dinner	**Location**	**Smith**	**Ham-Wil**	**Welch**	**Ham-Will**	**Smith**
	Item 1	Pizza/Pasta with Marinara	Hamburger or Black bean Burger	Garden Burger w/ cheese	Chicken and Rice Burrito	Roast Turkey breast
	Item 2	Tossed salad	French Fries	Salad/Soup	Garden Salad	Mashed Potatoes
	Item 3	Fresh Mashed Potatoes	Tossed Salad	Yogurt parfait	Cookie	Green beans
	Item 4	Power-Aid	Fresh Fruit	Soda	Drink	Two cookies

The OWU Writing Center is located on the 3rd Floor of the R.W. Corns Building and is open from 9am -5pm Monday-Friday.

Got Writing? Visit the Writing Center - by Martine Stephens

Need help organizing that 5-page essay that's due next week? Aren't sure about what to include or exclude from your resume? Don't really understand how or when to use a citation? Want advice about writing cover letters for internships, scholarships, jobs, or personal statements for professional and graduate schools? Blocked on getting started with that long senior seminar essay? Then visit the OWU Writing Center!

The OWU Writing Center can help you with any kind of writing. We work one-on-one with students in 30 minute or 50 minute appointments. We are not a remedial center—our professional writing instructors will work with you on any skill at any point in the writing process, from getting ideas to brushing up on proofreading techniques. We never judge your writing, or tell you what to say or how to say it—we can guide you through the writing process and can help you learn skills to make any piece of writing the best it can be. We are located on the 3rd floor of the R.W. Corns Building in the Sagan Academic Resource Center, and are open from 9:00 a.m. to 5:00 p.m., Monday through Friday. Please stop by or call 740-368-3925 to make an appointment.

We look forward to working with you on your writing.

How to Spend Your Summer Vacation – by Seth McGuffin

Summer time is the best and easiest time to get in shape. Without the hassle and anxiety of classes, many of you will be working summer jobs or relaxing. Here are some training models to help you prepare yourself for the upcoming athletic year. *(Example exercises listed in italics.)*

I. Focus Your Training on the Core Body—The center of all power and strength in the human body originates in the core of the body. Imagine the human body broken down into three links of a chain: the upper body (ribcage up), lower body (mid-thigh down) and core body.

Abdominal Crunches
Leg Raises
V-ups

II. Train with Ground-Based Lifts and Bodyweight Calisthenics - Most athletes participate in standup power sports. Most sport skills are initiated with the feet applied to the ground. The more force an athlete can apply to the ground, with good balance, the greater the potential for speed and power. Even swimmers and other non-ground based athletes will benefit from ground-based training.

Cleans
Deadlifts

III. Athletic Lifts Not Isolation Lifts- Athletes of all sports will never isolate a single muscle group or joint in competition. Athletes use their whole body in a natural way. The superior athlete is the one that can best use their whole body. It is, in many cases, not how strong and powerful the athlete is but how they best use their strength and power that determines athletic success.

Jerks
Snatches

IV. Train for Power - Power Is the Function of Strength and Speed This is important for an athlete due to many factors. Thier own bodyweight, gravity, opponent's resistance, weighted implements, and other resistances that athletes must deal with in competition. Increasing speed of movement with the same mass lifted improves power. The less time it takes to move a mass a certain distance the higher the power output. By effectively using explosive lifts, squatting movements, medicine balls, agility drills, sled pulls, sled drives, bleacher sprints, kettlebells and speed drills you can greatly increase the potential for developing powerful athletes in sport.

Squats
Leg and Bench Press

V. Train Athleticism The positive qualities of the superior athlete are: strength, power, speed, agility, flexibility, coordination, kinesthetic awareness, rapid reorientation from disorientation, rapid gathering from poor positions, sport specific condition, skill expertise, mental toughness, and being goal-driven. The enhancement of these qualities must be part of any strength program regardless of the particular sport. The intensity and volume level of each quality will be determined by sport.

Plyometric and Agility Training

VI. Train the Push and Pull Together As much as possible workouts are developed to train the upper body pressing with the upper body pulling. Two birds can be killed with one stone. This is done usually in the same time it would take to do one lift in most workouts. You can do this by performing supersets, rotating each set from the press to the pull.

Any type of lift using a cable or band

VIII. Single Limb VS. Two Limb In many sport skills, athletes will transfer weight from one leg to another and from one arm to another in a natural way. For athletes, it is as important to have strength, balance and coordination on one foot as it is on two feet.

IX. Short, Intense and Organized Workouts Are Best Although there are some differences in these methods of training there are three common threads that run throughout all of them:
1) Short in duration
2) Extremely intense
3) Highly organized.

Guidelines for Athletic Lifting:

- The more muscles, tendons, ligaments and joints used through a wide range of motion the more athletic the lift is.
- When the resistance is held in the hands and the feet are placed on the ground, in the standing position, the lift is more athletic.
- The further the resistance is moved, during the lift, the more athletic the lift is.
- The faster the resistance is moved, for that prescribed intensity, the more athletic the lift is.
- The faster the body moves around or under the resistance, during the lift, the more athletic the lift is.

Hamstring Injuries cont'

bed and after waking up in the morning. As discussed earlier, the muscular imbalance between the quadriceps and hamstring can contribute to hamstring strains. So when designing a weight program, make sure that there are enough exercises to keep the hamstrings at 60-70% strength of the quadriceps. As part of your strength routine, you should perform eccentric leg curls (negatives). If we can improve our strength during this phase, hopefully we can reduce the incidence of these injuries. Additional exercises that you can do include: Gluteus Kick Backs, Good Mornings, Hack Squat, and Hamstring Curls with an exercise ball.

Conclusion
Finally, all of your coaches give you a summer or off-season workout plan. DO IT. Be in shape to play your sport, don't play your sport to get in shape. When you return to campus, you will have many long and difficult practices. If you do not do what is asked of you in the offseason, you will have sore muscles that become tight and predispose you to a soft tissue injury. A former coach put it best when he said that you perform off-season conditioning to be in shape for pre-season practices and preseason practices get you in shape for games.

If you would like a Hamstring "Prehab" program, please contact your team's athletic trainer.

"Be in shape to play your sport, don't play your sport to get in shape"

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Recommended Reading:

Nancy Clark's Sports Nutrition Guidebook; the #1 nutrition resource for active people.

By Nancy Clark

Given to me by a sports nutritionist, this book provides basic nutrition information, how to design your diet to modify weight (both loss and gain), and over 100 pages of recipes. It also covers pre-, during, and post-exercise nutrition.

Ohio Wesleyan Univeristy—Athletic Training Mission Statement

The Ohio Wesleyan University Athletic Training Staff will strive to provide a comprehensive medical approach to the care delivered to Ohio Wesleyan University Student Athletes. We will provide accessible, professional and timely health care that allows the student athletes to participate in intercollegiate athletics. When decisions are made concerning student athlete's participation status, the Ohio Wesleyan University Athletic Training Staff will keep overall student athlete welfare as the cornerstone. Care includes, but is not limited to; Prevention, Evaluation and Rehabilitation of athletic related injuries, Referrals to on and off campus medical providers, and open communication with Student Athletes, coaches, physicians, administrators, and parents when applicable.

This medical plan will have a multi-disciplinary approach making sure that care includes both physical and mental well being, and not only helping student athletes with participation status in athletics but will also provide life skills that they will be able to use long after graduation from Ohio Wesleyan University. In order to have this type of approach many resources, both on and off campus will be utilized. These resources include but are not limited to: 1. Ohio Wesleyan University Student Wellness Center, 2. Ohio Wesleyan University Student Counseling Center, 3. Team Physicians from Max Sports Medicine, 4. Diagnostic Radiology and Emergency Medical Care from Grady Memorial Hospital, 5. Auxiliary Medical Services provided to Ohio Wesleyan University by OhioHealth, 6. Other resources as needed. The Ohio Wesleyan University Athletic Training Staff will work hard to continue to build and maintain strong working relationships with the resources listed above.

Thoughts From Henry St.— by Todd Miller

At some point in your career you have either said or heard that you need to take advantage of opportunities when they present themselves, because you never know when they may be taken away. Whether or not you take that statement seriously, let me tell you a story……

Joe Heskett grew up in northeastern Ohio, and won 3 state wrestling championships at Stow Walsh Jesuit High School. He attended Iowa State University, where he was a 4-time NCAA All-American (never finishing worse than 3rd), 3-time NCAA finalist, and the 2002 165lb. NCAA champion. At the end of his NCAA wrestling career, he set his sights on becoming an Olympian. He won the 2007 US Senior Open and World Team Trials, and represented the United States at the World Championships in Baku, Azerbaijan. After placing 5th, he was ready to begin the final stages of his training to reach the goal of making the 2008 Olympic team. During his first practice, he complained of chest pain and had an accelerated, weakened pulse. After examination, EMS was activated, and a defibrillator was used. Joe stabilized and was transported to the hospital. What was initially thought to be a freak incident, turned out to be Hypertrophic Cardiac Myopathy. Joe required a pacemaker be implanted and his wrestling career came to an abrupt conclusion.

In life, we often take our opportunities for granted. We don't appreciate what we currently have. We are a part of something at OWU; whether it is in athletics, the fine arts, academics, or another area of interest, we are on a TEAM. For most of us, this will probably be the last "true" TEAM of which we will be a part. I know that you will be able to continue to play your sport, but adult recreation leagues are not the same. You have four years to be a part of a TEAM, take all four years seriously and put forth your best effort, dedication, and attitude. I wouldn't wish regrets upon anybody, especially to people I know and respect.

Your athletic career will come to an end at some point, and often that time is out of your control. Your time at OWU should be a meaningful experience. From every rep of every drill of every practice to every minute of every game, make the most of your opportunity. You don't want to look back at your time at OWU and say, "I wish I would have done…."