Bacterial And Viral Infections Essay, Research Paper

Being part of the Sports Medicine profession, Athletic Trainers have to be ready for anything and everything when it comes to treating their athletes. This includes recognition, evaluation, education and prevention of various problems. One specific aspect of this is having a basic knowledge of contagious diseases that is seen all too commonly in Athletics. Some examples of this include Tinea Pedis(Athlete’s Foot), Conjunctivitis(pink eye), and Tinea Corporis(ringworm). Although these conditions aren’t life threatening, they are bothersome and can mean removal from play for the individual. Early recognition by the athlete and Athletic Trainer means immediate treatment and loss of practice can be kept to a minimum.

Tinea Pedis, commonly known as “Athlete’s Foot”, is one of the most prevalent and distinguishable conditions a person can contract. Over 10% of the population develops Athlete’s Foot every year and 75% of the US population will have Athlete’s Foot sometime in their lives(Hamann, 1994). It rarely occurs before puberty and is found more frequently in adolescent and young adult males. Tinea Pedis is commonly contracted by walking barefoot on wet

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floors around swimming pools and public showers that are contaminated. These areas stay warm and moist all the time and this promotes abundant growth of the fungi. While all athletes are prone to this problem because of profuse sweating on a daily basis, swimmers are the source of a great number of Tinea Pedis cases. Diagnosis of Athlete’s Foot is usually made from history and clinical examination. Microscopic examination of a wet mount of skin scrapings in a 10% potassium hydroxide solution can reveal branching fungal forms, thus confirming the diagnosis. It is mostly found between the third and fourth and fourth and fifth toes but may extend onto the plantar or dorsal forefoot. As stated above, moist environment promotes the growth of the fungi and gram-negative bacteria that is also present on the skin in these areas. The normal acidity of the skin is decreased, which favors the growth of these pathogens. Fungi initially damage the outer layer of the epidermis and that causes the dry and scaly Athlete’s foot appearance. As the action of fungi and bacteria continue, inflammation increases and fluid may be excreted from the affected areas. This causes more pain, redness and itching. If left untreated, bacterial growth could predominate and lead

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to erosion of the plantar skin. Some signs and symptoms of Tinea Pedis are moist, soft red or gray-white scales on the feet, cracked, peeling and dead skin areas. Sometimes small blisters can form on the foot and itching is common. There are several self-care procedures for Athlete’s Foot. Wash feet two times a day and dry well. Apply OTC anti-fungal powder, cream or spray between toes, socks and shoes. Wear clean socks made of cotton or wool because the natural fibers absorb some of the moisture. Change socks during the day to help feet stay dry and wear shoes that provide some ventilation, like sandals. Finally alternate shoes daily to let each pair air out between wearings. If symptoms do not subside after doing all of the above, send the athlete to a physician for further evaluation and treatment. To lessen the odds of your athletes contracting Athlete’s Foot, educate them on prevention. An Athletic Trainer can describe signs and symptoms of this condition so the athletes can catch it in its early stages. They are the ones looking at their feet every day. An effective way to stop the spread Athlete’s Foot is to wear sandals in locker rooms, showers and on the pool deck.

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Also from the Tinea family, Tinea Corporis(ringworm) is found all too common in athletes. Once again males are more often infected than females. The organisms that cause ringworm can live in humans, animals and soil. Tinea Corporis is contracted through direct or indirect contact with skin of an infected person. It is also transmitted through floors, shower stalls, benches that are contaminated. A less common way in sports, but a way none the less is through petting infected puppies or kittens. Athletes are very susceptible to contracting ringworm because of the body to body contact they endure on a daily basis. The moist portion of the lesion is potent with the disease and that mixed with sweat can get everywhere. Athletic Trainers can spot Ringworm from the Swim team to the basketball team. However the greatest number of individuals who get ringworm every year in athletics are the wrestlers. They have constant close contact and fluids are spread from the infected person, to his opponent, then his opponent wrestles another person and so on and so on. The mats are contaminated and when the wrestlers come into the Training Room, the tables are contaminated as well. The signs and symptoms of Ringworm begin with red, slightly

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elevated scaly patches. The lesions are ring shaped and new patches arise on the periphery while the central area clears up. This leads to the “ringworm appearance”. A great number of people believe there is actually a worm growing under the surface of the skin but this is entirely untrue. The periphery may be dry and scaly or moist and crusted. Tinea Corporis is found usually in non-hairy areas like the face, trunk, arms and legs. Treatment for this condition is very similar to that off Tinea Pedis. Wash the area frequently with soap and water. Apply OTC topical anti-fungal cream to the affected area as directed. Many Training Rooms are already equipped with this cream. The athlete should be excluded from swimming pools and activities that could expose others, including practice while the lesion is open. If the athlete must participate in practice, make sure the area is completely and properly covered. A bioclusive covering, bandage or tape can be used to dress the area. By the time athletes, especially wrestlers, reach the collegiate level of competition they basically know if they have ringworm. Daily self-examination of the athlete can catch the red patch in its early stages and proper care can begin immediately to

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prevent spreading to other teammates. There are products out on the market that can help prevent transmission of Tinea Corporis. An example of this is Kenshield. It is a foam that when applied becomes an invisible protectant and barrier. Kenshield is specifically designed for athletics and won’t wash away with perspiration. However, these products can be expensive. A 22oz. Can of Kenshild, for example, is $18.00. This product isn’t just for athletes but is extremely useful in protecting Athletic Trainers themselves.

In addition to Tinea Pedis and Corporis, Conjunctivitis(pink eye) is very common in Athletics. Conjunctivitis is an inflammation of the conjunctiva, which the name would suggest. The conjunctiva is a moist, delicate membrane that lines the inside of the eyelids and covers the whites of the eyes. The fluids in an infected eye is extremely contagious. A person may only have conjunctivitis in one eye but if they itch the infected one and then rub the other, the infection is that easily spread. If an athlete touches their eye and then hugs someone or touches a doorknob, other people are at risk of becoming infected. Using other athlete’s clothes, towels,

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eye makeup or sunglasses can put him or her at increased odds. Conjunctivitis can commonly spread like wildfire throughout a swimming team because of the sharing of goggles and towels. Sometimes the redness that is the first symptom is commonly mistaken for irritation from the chlorine in the pool. Signs and symptoms of Conjunctivitis include scratchy or painful sensation, tearing, and itchy and swollen eyes. The eye is excessively red, resembling a “bloodshot eye”. The most defining sign is difficulty opening eyes in the morning because the lids are “crusted” shut from mucous. There are two kinds of Conjunctivitis: viral and bacterial. Both produce very similar symptoms but the bacterial strain symptoms appear between 24-72 hours after exposure whereas the viral strain can range anywhere from 12 hours to 12 days. There are not many ways to treat Conjunctivitis. Sometimes, if left untreated, can run its course in a few days but a majority opt to see a doctor to receive eye drops. To prevent spread of pink eye, encourage your athletes not to share anything that would come close to touching the eye. Catching pink eye in the first day or so and starting treatment, the athlete may

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prevent the spreading of the infection to the other eye or to other teammates.

In conclusion, the Athletic Training profession plays a major role in keeping athletes healthy and competing in the sports they love by having proper knowledge of different diseases and infections. Even conditions that may not seem important like Tinea Pedis, Tinea Corporis and Conjunctivitis can make an athlete loose valuable playing time. By being able to identify the above problems, knowing how they are transmitted and how to prevent further spread, the Athletic Trainer is taking major steps to help their athletes and keep them as healthy as they can be.

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