Nursing the Sport Injuries

Kochuthresiamma Thomas

Athletics have become an integral part of our life style. Today all age groups are encouraged to pursue an active life style to delay and prevent some of the problems associated with ageing. Youngsters' involvement in athletics teaches us to be team players, face competitions and basically to have fun while adults compete to reduce stress, to stay healthy and to have fun. Whether amateur or professional, adolescent or mature, participation in athletics is important both for our physical and psychosocial development.

Participation in sports however brings with it the risk of injury. The evolution of sports medicine as a subspeciality of orthopedics has occurred in part because of the patient's desire to have a physician and health care team who understand their need to return to their sport as early as possible.

Common Foot injuries in athletes

Nail disorders of the foot

Ingrown Nails

Ingrown nails are caused by improper trimming, by an injury to the nail or soft tissues from tight socks or poorly fitting shoes or by repeated trauma to the toes. The initial stage symptoms often include erythema and pain. Treatment includes warm soaks to decrease inflammation and application of prophylactic antibiotic creams. If it is not treated properly, infection and cellulitis may develop. At this stage treatment includes incision and drainage, appropriate antibiotics and socks. To prevent ingrown nails, cut the nails straight across.

Subungual hemorrhage (Black Toe nails)

Black toe nails may be caused by an acute injury such as jamming the toe or from repeated trauma to the tip of the shoes. This may be caused by short shoes or insufficient height of the toe box, as seen in some running shoes. The black discolouration is the result of bleeding beneath the nail.

If the hemorrhage is recent and painful a paper clip can be heated until red hot, then placed on the nail plate and pressure applied until it passes through the nail plate. This will decompress the blood that has accumulated between the nail plate and nail bed and will often relieve the pain immediately.

Skin disorders of the foot

Blisters

Blisters are produced by excessive friction and pressure between the skin of the foot and either the socks or lining of the athletic shoe. Treatment includes cleansing the skin with soap and water, draining the fluid from the blister and dressing with antibiotic ointment.

Calluses

A callus is a localized thickening of the skin caused by excessive pressure. They are commonly seen on the ball of the foot as well as along the inner and outer boarders of the foot often associated with a bony prominence. Treatment includes applying moisturizing cream or lotions, padding the area and wearing properly fitted shoes.

Fungal infection (Athlete's foot)

Athlete's foot is characterized by itching, oozing and blister formation. Commonly seen between the toes, but may involve the bottom of the foot and nails as well. Treatment consists of soaking and cleansing the foot daily. Following the soaks, antifungal cream should be applied to the feet.

Pyoderma (Bacterial infection)

Infection is caused by an abrasion or opening in the skin such as cracks between the toes where it is dark and moist. Treatment includes warm soapy water soaks and topical and systemic antibiotics.

Contact dermatitis is a form of allergic reaction. It will be characterized by skin inflammation over the dorsum of foot or toes. Treatment includes warm water soaks and topical or oral anti-inflammatory drugs and avoiding irritants.

Contusions occur in contact sports like football soccer and basketball. The immediate treatment of a contusion consists of RICE (Rest, ice, compression and elevation)

Hammer Toes

A hammer toe is a flexion deformity of the toe usually caused by a muscle imbalance. Pain is experienced over the top of the toes, where callus formation is often present. Treatment consists of protective padding for the toes as well as selection of athletic shoe with adequate height in the toe box.

Bunions

A bunion is an enlargement of the side of the big toe joint caused by gradual dislocation. It causes pain, swelling and redness over the deformity. In mild cases treatment includes padding and selecting shoes that are of adequate width. In more severe cases, surgery may be indicated to remove painful bump and realign the great toe.

Capsulitis

Capsulitis is experienced as pain and swelling in the ball of the foot. It frequently involves the joint between the second toe and second metatarsal in athletes.

Sesmoiditis

Pain beneath the great toe is caused by an inflammation of one of the sesamoid bones. It is treated by rest, ice, aspirin and padding to protect the area.

Neuroma

A neuroma is a thickening of a nerve cell in the ball of the foot, usually involving the 3rd and 4th toes. The

Author :
Associate Professor, College of Nursing, Trivandrum (at the time of writing this article).

athlete often complains of sharp shooting pain extending to the toes. Treatment consists of padding and cortisone injection. Surgical removal for those who do not respond to this treatment.

Stress fracture

Stress fractures are caused by repetitive stress on the foot for prolonged periods of time. Commonly seen in metatarsals, but may involve any of the foot bones. Symptoms include swelling and pain confined to a focal area. Treatment consists of immobilizing the foot in a rigid fracture shoe with a compression dressing for 3-4 weeks.

Role of the Nurse

There is no doubt that the nurse, no matter what her speciality, is frequently consulted on problems associated with a sports related injury.

Sports' Nursing is an evolving subspecialty in orthopedics. The Nurse plays a vital role in the education and management of the athlete's program and participates in the rehabilitation team when injury occurs. Because athletes have the drive to return to an active life style, sports Nursing is interesting, fast paced and rewarding.

Dealing with an injured athlete, no matter what his/her age is can be much like dealing with a child. They are frightened, in pain and can easily be confused by advice from parents, teammates, coaches and trainers.

An informed and empathic nurse can be invaluable in eliciting history from the patient and other sources, if necessary, before even seeing the physician for diagnosis. Physical therapy modalities and close communication with therapists and trainers become the responsibility of the Nurse. The Nurse must understand and develop ability to deal with the psychological repercussions of an athlete being away from sport for a period of time, be it short or lengthy.

Special needs of athletes must be considered when planning the care of these patients. These patients wish to return to competition safely but rapidly. Support, encouragement and understanding from a knowledgeable health professional are invaluable.

Continued from Page 269

Table 3: Awareness regarding AIDS transmission

Mode Of Transmission	Yes	No	Don't Know
Kissing	10(33.4)	17(56.6)	3(10)
Touch with patients	2(6.7)	24(80)	4(13.3)
Through food	5(16.7)	21(70)	4(13.3)
Contact with fomites	5(16.7)	17(56.6)	8(26.7)
Being around the AIDS patients	3(10)	24(80)	3(10)
Having sex with person with AIDS	28(93.3)	2(6.7)	
Transplacental	21(70)	2(6.7)	7(23.3)
Shaking hands	8(26.7)	17(56.6)	5(16.7)
Blood transfusion	28(93.4)	1(3.3)	1(3.3)
Sharing needle	25(83.3)	2(6.7)	3(10)

[Figures in parenthesis indicate percentages]

Table 4. Awareness regarding AIDS treatment and prevention

Treatment/Prevention	Yes	No	Don't Know
Use of condom	22(73.4)	4(13.3)	4(13.3)
Exercise helps to prevent AIDS	8(26.7)	17(56.6)	5(16.7)
Vaccine available	5(16.7)	12(40)	13(43.3)
AIDS can be cured	6(20)	20(66.7)	4(13.3)
No treatment available	12(40)	4(13.3)	14(46.7)
Can be cured if treated early	16(53.3)	8(26.7)	6(20)

[Figures in parenthesis indicate percentages]

References

1. Benara SK, Khelendra RK, Chaudhary BN, AIDS: A survey of knowledge, attitude and belief of undergraduate students of Delhi University. Ind J Com Med 1992 ; 17(4): 155-159.
2. Bhattacharya M. AIDS awareness among Anganwadi workers and labourers. CARC Calling. 1994 ; 7(2): 32-33.
3. Datta C, Bandyopadhyay D. knowledge and attitude in relation to HIV/AIDS among service nurses of Calcutta. J Indian Med Assoc 1997; 95(3):75-77.
4. Doyle YG, Conroy RM. What Irish school children know about AIDS. Pub Health 1991; 105: 167-171.
5. Ficarrotta TJ, Grade M, Bilwise N. Predictors of medical and Nursing students levels of HIV/AIDS knowledge and their resistance to working with AIDS patients. Acad Med 1990; 65(7): 470-471.
6. Gignac D, Oermann MH. Willingness of Nursing students and faculty to care for patients with AIDS. Am J infect Cont 1991; 19(4): 191-197.
7. Kubde SS, Zodpey SP, Vasudeo ND. AIDS awareness among Nursing students. Ind J Pub Hlth 1995; 39(3):109-112.
8. Menon V, Bharucha K. Acquired Immuno-deficiency syndrome and health care professionals. J Assoc Physicians India 1994 ; 42(1): 22-23.
9. Stiernborg M. Knowledge about and attitude to HIV/AIDS among students in a Sydney Nursing College. Nurse Educ Today 1992; 612(3): 207-214.
10. Tessaro I, Highriter M. HIV and the work intentions of public health Nurses. Public Health Nurse 1994; 11(4): 273-280.