PREVALENCE OF ANKLE SPRAIN AMONG PATIENTS PRESENTING IN OUTDOOR DEPARTMENT

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ABSTRACT:
A sprained ankle, also known as a twisted ankle, or rolled ankle is an injury where sprain occurs on one or more ligaments of the ankle. Knowing the symptoms that can be experienced with a sprain is important in determining that the injury is not really a break in the bone. This cross-sectional study was conducted among the patients presenting in orthopedics outdoor department of different hospitals. Name, age, gender, history of disease and disease duration were noted on a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. There were 100 patients included in this study i.e., 50 males (50%) and 50 females (50%). The mean age of the patients was 31.23±4.11 years. The minimum age was 21 years and maximum age was 39 years. Out of 100 patients only seven patients presented with history of ankle sprain.

KEYWORDS: ANKLE SPRAIN
INTRODUCTION:
A sprained ankle, also known as a twisted ankle, or rolled ankle is an injury where sprain occurs on one or more ligaments of the ankle. Knowing the symptoms that can be experienced with a sprain is important in determining that the injury is not really a break in the bone. When a sprain occurs, broken blood vessels will hemorrhage into the tissue that surrounds the joint, causing a visible bruise. White blood cells responsible for inflammation migrate to the area, and blood flow increases as well. Along with this inflammation, swelling and pain is experienced. The nerves in the area become more sensitive when the injury is suffered, so pain is felt as throbbing and will worsen if there is pressure placed on the area. Warmth and redness are also seen as blood flow is increased. Also there is a decreased ability to move the joint. The diagnosis of a sprain relies on the medical history, including symptoms, as well as making a differential diagnosis, mainly in distinguishing it from strains or bone fractures. The Ottawa ankle rule is a simple, widely used rule to help differentiate fractures of the ankle or mid-foot from other ankle injuries that do not require x-ray radiography. It has a sensitivity of nearly 100%, meaning that a patient who tests negative, according to the rule almost certainly does not have an ankle fracture. If ankle pain is persistent 6-8 weeks after initial sprain, MRI imaging of the joint can be considered to rule out peroneal tendon, osteochondral, or syndesmotic injury. Ankle sprains are classified grade 1, 2, and 3. Depending on the amount of damage or the number of ligaments that are damaged, each sprain is classified from mild to severe. A grade 1 sprain is defined as mild damage to a ligament or ligaments without instability of the affected joint. A grade 2 sprain is considered a partial tear to the ligament, in which it is stretched to the point that it becomes loose. A grade 3 sprain is a complete tear of a ligament, causing instability in the affected joint. Bruising may occur around the ankle. Initial treatment commonly consists of rest, icing, compression and elevation (which is often referred to by the mnemonic RICE or sometimes PRICE with P
being "protection"). These elements have been recommended by physicians for decades for the treatment of soft tissue damage, and sprained ankles, one of the most common soft tissue injuries. RICE helps limit the amount of swelling to the area, and "facilitates venous and lymphatic drainage". While nearly universally accepted as a treatment, there is insufficient evidence to determine its relative effectiveness as therapy for acute ankle sprains in adults, and the National Athletic Trainers Association notes that most of the rationale for using RICE or individual components is based largely on low-quality clinical trials and laboratory studies with uninjured participants or animal models (1-3). The objective of this study was to see the prevalence of ankle sprain among the patients presenting in orthopedics outdoor department.

MATERIAL AND METHODS:
This cross-sectional study was conducted among the patients presenting in orthopedics outdoor department of different hospitals. Name, age, gender, history of disease and disease duration were noted on a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. The quantitative variables were presented as mean and standard deviation. The qualitative variables were presented as frequency and percentages.

RESULTS:
There were 100 patients included in this study i.e., 50 males (50%) and 50 females (50%). The mean age of the patients was 31.23±4.11 years. The minimum age was 21 years and maximum age was 39 years. Out of 100 patients only seven patients presented with history of ankle sprain.

DISCUSSION:
Many different types of rehabilitation exercises can be done to aid an ankle sprain regardless of the severity of the injury. The purpose of rehabilitation gives the ability for the ankle to regain strength and flexibility. A sprained
ankle becomes swollen due to the increased amount of edema within the tissue, since this physiological effect is the foundation of the pain the decline of edema is the main goal during the beginning of rehabilitation. This can be done instantly by implementing the RICE mechanism which is resting the ankle, applying ice, compressing, and elevating it. The emphasis of the first week of rehabilitation should be on protecting the ankle to avoid further damage. As the healing progresses, stress can be applied by different mechanisms until the ankle is fully recovered. The key to a fast recovery is to implement all the different types of ankle sprain exercises so that the range of motion will increase while the pain is decreasing. In cases where the ankle does not heal in an appropriate amount of time, other exercises need to be implemented so that strength and flexibility can be regained. Physical therapists assign different types of ankle sprain exercises that deal with ankle flexibility, strengthening, balance, and agility. If an ankle sprain does not heal properly, the joint may become unstable and may lead to chronic pain. Receiving proper treatment and performing exercises that promote ankle function is important to strengthen the ankle and prevent further injury.

Ankle sprains can occur through either sports or activities of daily living, and individuals can be at higher or lower risk depending on a variety of circumstances including their homeland, race, age, sex, or profession. In addition, there are different types of ankle sprains such as eversion ankle sprains and inversion ankle sprains. Overall, the most common type of ankle sprain to occur is an inversion ankle sprain, where excessive plantar flexion and supination cause the anterior talofibular ligament to be affected. A study showed that for a population of Scandinavians, inversion ankle sprains accounted for 85% of all ankle sprains. Most ankle sprains occur in more active people, such as athletes and regular exercisers (4-6).

REFERENCES:


