



## Theoretical Study of Freedom of Movement of Human Limbs and Restrictive Conditions After Injury to The Limbs

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### ABSTRACT

In the article, the theoretical study of the freedom of movement of the human limbs and the limiting conditions as a result of damage to the limbs. We will tell you in detail about the types of injuries and the classification of injuries in the article. In this article, we can discuss the study of the freedom of movement of the limbs and the limiting consequences as a result of injury.

### Keywords:

Trauma, legs, feet, arms, injuries, human well-being, destructive factor, consequences

The most common cause of hand and foot barking is when the body has been in an uncomfortable position for a long time. If you sleep at night with your hands under your head, you will not "feel" the hand in the morning - so the hands will rub while you sleep. Another common position: if you sit for a long time playing your leg, you will not feel the leg until you change your position. If the sensitivity returns quickly when changing the position of the arms and legs, both cases are completely harmless.

Trauma is a violation of the integrity and functions of organs and tissues. Injuries are classified according to the time of the incident: acute injuries occur from the immediate impact of external factors, and for the formation of chronic damage, systematic exposure to the same destructive factor is necessary. In everyday life, we mainly deal with acute injuries, chronic injuries are most often referred to as professional. The main types of injuries include: mechanical, physical, chemical, biological and combined injuries.

What to do: try to control the state of the body, do not create artificial barriers to blood circulation. Get used to sleeping in another position. If from time to time the sensitivity in the arm or leg disappears for no apparent reason, does not improve even when changing position, this is a serious reason to go for an examination by a neurologist or osteopath. Another common cause of hand swelling is wrist canal syndrome. Long work at the computer in an uncomfortable position can be caused by incorrect hand bending when using a tablet or laptop.

This physical injury is easily identified by convulsions, violation of the rhythm of the heart and breathing, loss of consciousness is possible. The affected area of the skin changes color, acquiring a yellow-brown hue. The lightning leaves a pattern similar to them-a scar. Burns are formed due to thermal effects on the body - the sun, open fire, flammable mixtures.

They are divided into four stages, depending on the duration of contact and the area of the burn: the first is easily treated on its

own, the second requires a doctor, the third and fourth - an immediate call for an ambulance. With prolonged observance of the low-temperature regime, frostbite occurs. This type of injury is also divided into four stages. But it is worth consulting a doctor for any kind of frostbite, so as not to miss the development of hidden pathological processes in the body.

**Chemical injuries.** More rare, but no less dangerous are chemical injuries. They occur when the skin or mucous membrane comes into contact with aggressive chemicals (alkali, acid). They can also be called chemical or caustic burns. Types of chemical injuries. Examples of chemical injuries, like other burns, are classified according to the degree of damage caused: Superficial burns or first-degree burns affect only the outer layer of the skin, called the epidermis.

The area will be red and painful, but, as a rule, there is no permanent damage. Partial burns or second-degree burns spread to the second layer of the skin, called the dermis. You may develop blisters and swelling, and you may also be left with scars. Full-layer burns or third-degree burns pass through the skin and can damage the tissue underneath. The area may look black or white. Because the nerves are destroyed, you may not feel pain.

**Biological injuries.** Biological injuries occur as a result of human exposure to poisons, microorganisms, bacteria, as well as insect or animal bites. Biological injuries include bites and scratches of animals. On their claws and teeth are pathogenic bacteria that cause severe infection. If a stray animal bites, then you immediately need to be vaccinated against rabies. First aid for bites and scratches is the same as for cuts: the wound is treated with an antiseptic, a bandage is applied. With deep and difficult-to-heal wounds, medical care is necessary.

**Combined injuries.** Combined injuries are injuries sustained as a result of simultaneous or sequential exposure to several damaging factors: mechanical, physical, chemical, etc., for example, a limb fracture and a burn. These fractures occur due to excessive axial load, blows to the hip and lower leg, car

accidents, and in old people - from falling sideways (so the hip neck breaks).

The symptoms of damage to this localization are quite diverse. Cervical hip fractures are characterized by turning the foot outwards and the inability to lift the extended leg up. With fractures of the fibula, the main symptom is pain (the supporting function is not impaired), with injury to the tibia, displacement often occurs due to the peculiarities of the attachment of muscles to it. Swelling of the leg after a fracture of the lower leg also appears very often. Moreover, due to the compression of blood vessels, it can persist for quite a long time even after the veins are released from the bone fragment pressing on them.

**Physical injuries.** Another common category is physical injuries. What injuries are physical? These include damages that occur under electrical or thermal influence. There are three most common types: electrical injuries, frostbite burns. The cause of electrical injuries is faulty household appliances, wiring, less often - a lightning strike.

The most frequent among all fractures of the bones of the lower extremities are various fractures of the ankles. They usually occur when the leg is turned up and all its weight is transferred to it. Less often, the ankles suffer from a direct blow. Composing the ankle joint, they perform a supporting function, therefore, when they are fractured, a person's ability to step on the affected leg drops sharply.

The pain of an ankle fracture is very strong, it is she who makes the victim spare the injury site. If the pain is not from an uncomfortable position, see a doctor. Especially if they bark almost every day. Only a specialist can determine the true cause of the pain, make a diagnosis and prescribe the appropriate treatment. The possibility of a ruptured or broken arm or wrist is a risk (and concern) for those who practice contact sports such as kickboxing or martial arts, but also a risk (and concern) for those who work hand in hand in terms of trauma and constant pressure. on the limbs.

Ruptures and fractures of the hands and wrists, as well as tendinitis and inflammatory pathologies, are very common in untrained and

inexperienced amateur athletes and women. Inexperience leads to improper performance of sports movements, lack of preparation and warming up before exercise increases the risk of injury.

That is why it is necessary to use the right protective equipment and supports when practicing sports such as kickboxing, volleyball and sports, preparing hands, wrists and fingers for sports with stretching in ankle, knee, hip and shoulder injuries. amateur basketball. Knowing the risk of certain movements, such as dribbling in volleyball or pulling in CrossFit, can also help prevent the development of injuries.

Any form of acute pain is typically brought on by a particular event and manifests as an immediate, excruciating agony. Acute injuries to the foot and ankle might include fractures, strained muscles in the foot or ankle, or sprained ankles or feet. The majority of these are regarded as "rolling" injuries because the foot and ankle are excessively rotated. It is crucial to take care of an injury right away if it breaks near a joint region in your foot or ankle, which you will almost likely be aware of. The ligaments, which are bodily tissues that connect bones to one another, are harmed when the foot and ankle are overextended.

You won't be able to put any weight on the afflicted foot if you have a strain. A tendon that crosses the ankle on the outside, inside, top, or rear is typically injured when the foot or ankle is strained. That obviously means that a strain can occur in a wide variety of forms. With a strain, you frequently experience discomfort, bruising, and swelling after hearing or feeling a pop. For instance, the largest of the tendons, the Achilles tendon, which is located in the foot and ankle, may burst without your knowledge. Usually, a forceful event-such as landing from a jump, pushing a car, or taking off into a strong wind-causes a rupture.

Patients with an Achilles rupture frequently feel as though they just received a kick to the heel, but when they turn around, nobody is present. Additionally, patients will experience a tiny gap in their Achilles. The injury requires immediate attention. If the injury is addressed effectively and quickly, there are non-operative therapy options available.

There are a variety of additional acute injuries that may be covered, but they all require quick medical attention. The recommended postoperative recovery period is two weeks, though it may be shorter depending on how severe the injury is.

If arthritis is not treated, joint deformities may result. You should get medical attention right away if you are experiencing pain or other symptoms since it may be necessary to consider surgeries like ankle replacement or ankle fusion.

Sports-related concerns including impingement and laxity are more prevalent in people who are active. You should see a doctor if your ankle feels like it's about to roll over all the time, if you're cutting yourself sharply, or if you don't trust your ankle. There are excellent techniques that can resolve this matter and assist you in preventing further harm, including a serious ankle sprain on.

If two days of rest and ice packs are not enough, it is important to consult a specialist for an orthopedic examination. Injuries should not be neglected, as they play an important role in the daily life of the hands. For those who need to return to their activities in the short term in the event of a hand or wrist fracture, an alternative to gypsum plaster is to use performance plates or screws that act as internal plaster. In this way, the segment affected by the injury remains stationary, but the hand can move while waiting for the bone to repair itself.

#### References:

1. Woodland DL. Hand, Foot, and Mouth Disease. *Viral Immunol.* 2019 May; 32(4):159. P
2. Mortlock DP, Innis JW. Mutation of HOXA13 in hand-foot-genital syndrome. *Nat Genet.* 1997 Feb;15(2):179-80. P
3. Chong KS. Principles in the management of a mangled hand. *Indian J Plast Surg.* 2011; 44: 219-26.
4. Tintle SM, Baechler MF, Nanos GP, 3rd, Forsberg JA, Potter BK. Traumatic and trauma-related amputations: Part II: Upper extremity and future directions. *J Bone Joint Surg Am.* 2010-Y

5. Gustilo RB, Anderson JT. Prevention of infection in the treatment of one thousand and twenty-five open fractures of long bones: Retrospective and prospective analyses. *J Bone Joint Surg Am.* 453-P
6. Coates SJ, Davis MDP, Andersen LK. Temperature and humidity affect the incidence of hand, foot, and mouth disease: a systematic review of the literature - a report from the International Society of Dermatology Climate Change Committee. *Int J Dermatol.* 2019 Apr;58(4):388-399. P