

Stocka Joanna, Simińska Joanna, Ratuszek-Sadowska Dorota, Miszewska Agnieszka, Świątkowska Anna, Głowacka-Mrotek Iwona, Nowacka Krystyna, Hagner Wojciech. The quality of life of people with spinal cord injury. *Journal of Education, Health and Sport*. 2018;8(2):20-25. eISSN 2391-8306. DOI <http://dx.doi.org/10.5281/zenodo.1163709>
<http://ojs.ukw.edu.pl/index.php/johs/article/view/5236>

The journal has had 7 points in Ministry of Science and Higher Education parametric evaluation. Part B item 1223 (26.01.2017).
1223 Journal of Education, Health and Sport eISSN 2391-8306 7

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The authors declare that there is no conflict of interests regarding the publication of this paper.
Received: 05.12.2017. Revised: 15.12.2017. Accepted: 31.01.2018.

The quality of life of people with spinal cord injury

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Key words: spinal cord injury, SCI, quality of life, disability

Abstract

Spinal injuries are the most common cause of formation of spinal subsequently they may be formed as a result of inflammation, tumors or other diseases. Among the consequences of spinal cord injury can be distinguished numbness, paralysis or paresis as well as restrictions within the urinary tract and sexual performance. There is also the increased chance of bedsores. The appearance of abnormal muscle tone and spasticity in the form of periarticular ossification. These problems make it difficult to "normal" functioning in society. Rehabilitation for patients with spinal cord injury is aimed at reducing symptoms

and finding methods that most effectively compensated by the quality of deficiencies in the functioning of society.

Spinal cord injuries usually concern young people, both men and women between 16 and 30 years old and more than half of the cases are the result of traffic accidents, another cause of SCI is falls from heights, sports injuries, osteoporosis and cancer. Consequences of spinal cord injury, ie. Numbness, weakness or paralysis of limbs as well as disorders of the urinary and sexual dysfunction effectively lower quality of life. The aim of the work is to show the problems of patients with spinal cord injury jobs evaluates the possibility of returning to "normal" functioning in society.

The spine consists of vertebrae 33-34, which build five sections: cervical, thoracic, lumbar sacral, coccygeal . The spine is the backbone of the human body cervical skull is mounted, the cross section connects to the pelvis thus allowing locomotion. Circles in its interior have a place here called the spinal cord canal of the spinal cord. Within the spinal canal extends the spinal cord is a part of the central nervous system leads on nerve impulses between the brain and peripheral portions of the nervous system. Core length is about 43-45cm. 31 can be distinguished pairs of spinal nerves; 8 cervical, twelve thoracic five lumbar, five sacral and coccygeal one pair of nerves. The above-mentioned known steam innervate. Core segments sensory, mobility and autonomously. The spinal cord is protected by the spine and three tires; dura mater, arachnoid mater and pia mater [2,11].

The classification of spinal injury

The simplest classification divides spinal for total and partial. The total damage to say when lifted all kinds of feeling (touch, pain, temperature, and orientation). Below the level of damage to the form of paralysis of all muscles supplied segments of the fault and below.

Due to the heterogeneous clinical picture in the partial spinal cord distinguished three divisions, depending on the level of the damaged segment of the supply area and depth:

1. . Shock movement and analgesia surface level of the spinal tracts preserved even deep feeling in feet.
2. Deep paresis, the absence of limbs in a functional way can this group also put patients with hemiplegia Spinal syndrome (Brown - Séquard).
3. Mild paresis, hindering the use of the full range of the limbs in a functional way. [1,5].

Complications of Spinal Cord Injury

Injuries of the spine and spinal cord, is the whole problem of diagnosis and treatment and so should be treated pouring. They combine them mainly neurological disorders. Problems and severity depend on the level of [3].

Respiratory system

Problems with the respiratory system typically involve patients within trauma of the cervical and thoracic. With the injury above C4 respiratory function is so difficult that the patient's breathing needs to be assisted. Level C5 is the imbalance between the activity of inspiratory and expiratory muscles. This disorder causes a decrease in vital capacity and increases the volume of residual air. Deterioration is the effectiveness of cough. The damage at the C7-C8 are already in auxiliary breathing muscles of the shoulder girdle. To prevent permanent changes lung parenchyma must be corrected as soon as possible the patient's respiratory system. At the level of Th10 trauma can lead to scoliosis, but this is the cause of being reduced lung capacity and impairs the function of the diaphragm. In young people the trauma of the cervical, there are often severe spinal deformity growing. These patients are sensitive to upper respiratory tract infections and it is easy for them to pneumonia. Important here are breathing exercises, which should belong to the patient's daily activities. [9]

Urinary tract

Temper bladder weave form pemphigoid, sympathetic fibers which comprises and parasympathetic. Center core, located at the level of Th11-L3 induces the contraction of the sphincter of the bladder. Urine is responsible for keeping the level of S2-S5. The interaction center inhibiting urination and stimulating the micturition determines the normal function of the bladder. Disruption of urinary bladder function resulting as a result damage to the innervation, causing disturbances in the normal process of urination is called neurogenic bladder. Depending on the level and degree of damage dysfunction may have a different

character. Damage to the lower or upper neuron gives rise to two different kinds of disorders, [2].

When the upper neuron damage arises spastic bladder, otherwise known as automatic, which is emptied periodically as a result of detrusor muscle contractions, independently of our will.

At the lower neuron damage bladder formed limp, otherwise known as autonomous. It is devoid of the arc reflex detrusor muscle, which results in the emptying takes place only under the influence of abdominal pressure or manual extrusion.

Paralysis or failure of the detrusor results in complete bladder emptying thus conducive to the formation of inflammatory conditions of the urinary system. Too strong hand squeezing the urine can lead to so-called. refluxing, withdrawal of urine from the bladder towards the kidneys. The most common complications associated with patients with spinal cord include infections of the lower respiratory tract [9].

Excretory system

When spinal cord injury usually leads to damage to the nerves controlling the work of the gastrointestinal tract. Above damage Th12 is destroyed, the ability to feel filled with the rectum, and the anal sphincter will be eased when the handpiece is fulfilled. Below Th12 damage is damage to the lower motor neuron, so. limp anus. Patients must frequently empty the intestine by pressure on the intestine or manual removal of stool [7].

Contractures, spasticity, swelling and pressure sores

During the first weeks of treatment, during the period of spinal shock appears flaccid paralysis. Over time, however, in patients after traumatic cervical and thoracic appears tense muscles of infected resting so spasticity.

Trauma and what goes behind him and therefore paralysis and immobility causes loss of normal venous blood pumping mechanism, which becomes the cause postural edema. Not providing proper patient position in bed, lack of rehabilitation continuing full mobility of joints can lead to contractures or extensor spasms. To prevent the formation of contractures should be around the clock to ensure the joints settings functional ranges. Traversing passive stretching exercises, avoiding long periods in one position [6].

Pressure ulcers are lesions of the skin and deeper tissues mainly in the defined point bone in the form of ulcers caused by pressure, and tissue ischemia. Manifested by redness and the final stage of necrosis. The deterioration of the microcirculation, which determines the normal metabolism of cells, impairs the function of blood vessels. Most bedsore is formed where the

distance between the skin surface and located underneath the skeletal system is small. The most common surroundings bedsores are coccyx, buttocks, spine and heel, ilium, humerus, around the greater trochanter, bone lateral feet, elbows, shoulder, back of the head [7].

Psychological aspect

In people with spinal it comes to the psychological shock caused by the sudden rise of disability. Patients are struggling with several problems. Numbness, muscle strength, loss of control of urinary and excretory and sexual organs. They affect the patient causing harm guilt, helplessness and shame. Like any spinal disease is a source of mental stress. Depending on the perception of the disease, patients in a variety of ways to deal with it are doing. Child psychologist such patient is therefore necessary to restore him to self-acceptance. Knowledge of how to deal patients with disability is a wealth of information that could significantly affect the efficiency of the rehabilitation process [8]

Quality of life

Quality of life is very broad, individually and dynamic. Quality of life is determined illness or disability can be understood as a consequence of the losses that have occurred in all aspects of human life. Treating the disease in the humanistic dimension leads to a breakdown of the content of life, and restricting freedom of action and the implementation of its targets reduces the quality of human life, taking away his happiness. [10]

Quality of life and SCI

Spinal carries many implications not only in the area of transport but also breathing, excretion, voiding and sexual function that significantly affect the quality of life. The emergence of disability also results in changes in the psyche of the patient to re-operate in the environment must come to self-acceptance.

Spinal affects the quality of life in a diverse and multifaceted. It affects the decline in physical performance in areas such as activities of daily living, mobility and the ability to work. The weakened muscle strength translates into faster fatigue during daily activities could thus discourage independent activity. Spinal cord injury can have a significant impact on the deterioration of the financial professional and is concerned with SCI largely of young people associated with the reclassification and adaptation of the workplace. Disorders related to urinary significantly affect the social life [1].

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