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COMPLEX REHABILITATION OF WARFARE MEMBERS

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The article analyzes the urgent problems of complex medical rehabilitation for people who experienced different kinds of traumas (physical, psychological) in areas of war actions and who cannot solve problems of adaptation and organism restoration without assistance. The importance of problem solving associated with ATO members rehabilitation is one of the most significant problems nowadays. Multidimensionality of medical rehabilitation tasks for injured war members needs effective functioning of this system as separate direction of clinical and social medicine. As it is known, Ministry of Health of Ukraine has created separate Department of Medical Rehabilitation and Palliative Medicine which will control working of this direction. According to official data, more than 55 thousand Ukrainian soldiers take part in armed conflict in the East of Ukraine. Recently, a number of those who return home as not only physically but also psychologically disabled has increased. The aim of this article is to analyze the urgent problems of complex medical rehabilitation for people who experienced different kinds of traumas (physical, psychological) in areas of war actions and who can not solve problems of adaptation and organism restoration without assistance. The rehabilitation of victims is a long-term process which needs qualified professionals, amount of whom is limited nowadays. A particular medical specialty "Physical and Rehabilitation Medicine" must be developed, which is existed in the EU. A unique compulsory State system of complex war members rehabilitation must operate and be adequately financed with centers across all regions of Ukraine.

Keywords: Comprehensive medical rehabilitation, military action, medicine, social adaptation, medical system.

War leaves its footprints on everyone who took part in warfare at least for one day. Each member of war operations may turn out to be in the situation when he needs additional medical and psychological help after returning home. Taking into account current situation in the country, the workload of medical-rehabilitation centers is expanding and a character of health seeking is posing new challenges for Ukrainian system of health care. Now Central Military-Medical Commission has issued about 10 thousand resolutions which include injuries, contusion, mutilation or diseases with ATO participation (antiterrorist operation). As noted in Recommendations by the results of parliament hearing, about 4000 ATO members had status of disabled war veterans in October 2016. Changes to the Article 11 of the Law of Ukraine "On Social and Legal Protection of Military Servicemen and Their Family Members" of 2015 require servicemen to be received obligatory psychological rehabilitation after returning from areas of war operations. Approval of indicated standard is accompanied by general criticism as it is openly contrary to foundations of Ukrainian legislation regarding health care which directly prohibits volitional and compulsory medical or psychological intervention. Lack of budgetary funding also complicate both compulsory psychological diagnosis and rehabilitation of ATO members.

Setting the problem. The importance of problem solving associated with ATO members rehabilitation is one of the most significant problems nowadays. Multidimensionality of medical rehabilitation tasks for injured war members needs effective functioning of this system as separate direction of clinical and social medicine. As it is known, Ministry of Health of Ukraine has created separate Department of Medical Rehabilitation and Palliative Medicine which will control working of this direction. Therefore, scientific programs and protocols of rehabilitations are being worked out. Nine Research Institutions deal with methodological control of rehabilitation centers, in particular, Ukrainian Research Institute for Rehabilitation of disabled persons at Vinnytsya National Medical University named after M. I. Pyrogov, Ukrainian Research Institute of Medical Rehabilitation and Balneology (Odesa), Ukrainian Research Institute of Social and Forensic Psychiatry and Drug Abuse Ministry of Health of Ukraine (Kyiv), Ukrainian State Research Institute of Medical and Social Problems of Disability Ministry of Health of Ukraine" (Dnipro). Eleven hospitals of medical rehabilitation were the clinical basis with a total of 1888 beds. Regional hospitals for disabled war were established later with additional 7248 beds as well as seven physiotherapeutic hospitals, about 12 thousand beds from the Joint-Stock company "Ukrprofzodorovnytsya" and departmental sanatorium and health resorts. It is necessary to point out, that international community and social organizations also help Ukraine to treat injured military personnel or those who have disabled after having been in areas of war actions.

Historiographical review. A lot of researchers were engaged in different types of complex medical rehabilitation: therapeutic physical culture as one of the most active method of medical rehabilitation – M. V. Kurella, A. F. Kaptelin, V. N. Moshkov, U. L. Naydin, K. A. Semenova; massage for recovery – A. E. Shterenherts, I. V. Dunayev, U. I. Vasichkin; medical rehabilitation: D. Renker, L. M. Klyachkin, M. M. Vynohradova, N. A. Shestakova, M. A. Rohovyi.

The purpose of the study was to analyze urgent problems of complex medical rehabilitation for people who experienced different kinds of traumas (physical, psychological) in areas of war actions and who can not solve problems of adaptation and organism restoration without assistance.

Results of the study and their discussion. V. Stebliuk (Head of the Commission for rehabilitation of ATO participants ATO, MD, PhD, Professor of Physical and Rehabilitation Medicine,) points out that tasks which must be solved by rehabilitation medicine will not be finished after the last shot at war or after the last soldier who had left hospital. This is the problem of future decades. And a lot depend on who will solve it. Instead of it, such a medical specialty as “medical rehabilitation” is absent in Ukraine nowadays [5]. The paradox inheres in the absence of complex scientifically-practical providing in this area as there is the scientific specialty (appropriate faculties and research institutes, as well as the chief profile external specialist of the Ministry of Health), but there is no medical specialty. That is why medical rehabilitation is occupied by physiotherapists, neurologists, traumatic surgeons and all related specialists [11]. Physical rehabilitation staff are prepared in academic direction “Physical Culture and Sport” at Pedagogical Universities, Higher Educational Institutes of Sport and Physical Culture. However, these specialists can not work at Medical Institutes [10].

According to official data, more than 55 thousand Ukrainian soldiers take part in armed conflict in the East of Ukraine. Recently, a number of those who return home as not only physically but also psychologically disabled has increased. Psychologists claim that rehabilitation is essential for both soldiers and society as a whole. For instance, S. Chyzhevskiy (Lieutenant, the Commander of the Military Unit and Subdivision Officer for Psychological Provision of the National Guard) noted that about 96% of war operation members may need professional psychological support as international experience and results of many investigations have shown [9]. Medical rehabilitation for war operation members is a part of such a phenomenon as “tactical medicine” which was created to provide medical care to victims in areas of active conflict and their evacuation to safe territory. Tactical medicine is necessary under conditions of military actions within the country and differs from civil medicine developed to provide medical care for population in peacetime or within a territory where there is no war [1].

Rehabilitation is a complex of measures aimed at health and efficiency restoration for people with mental or physical disabilities because of traumas or diseases. The aim of this process is disablement prevention during disease treatment and helping patients to achieve maximum physical, psychological, professional, social and economic usefulness which they will be able to do within an illness existed [3, 16].

Recovery of soldiers' health must be conducted on medical, physical and psychological levels in the framework of a complex rehabilitation treatment. Medical measures include usage of medicinal preparations and health-promoting effects of light, electricity, warmth meaning physiotherapy and all types of massage [12]. Physiotherapy and balneal treatment must be extensively conducted for rehabilitation of war members. Different devices, such as electro-laser treatment, magneto- and magneto-laser therapy, microwave therapy, UHF and US-therapies, UV-radiation, US-inhalers, paraffin therapy, mechanical simulators, hand massage, underwater shower-massage; salt, coniferous, herbal baths and press-therapy [4]. Medical rehabilitation is frequently needed after traumas such as barotraumas, residual effects of blast injury, closed craniocerebral injuries, post-concussion syndrome, firearm injuries and limbs freezing, fractures of various severities, as well as after pancystitis, acute tracheobronchitis, acute neuroinfections, cystitis, etc. Attention should also be drawn to the widespread aggravation of spinal problems among different age groups. Prolonged wearing of body armor leads to spine affection as well as traumas [4].

A vast majority of specialists providing medical assistance at the stage of rehabilitation are representatives of non-medicinal specialties: physical rehabilitologists, ergotherapists. Professionals in physical rehabilitation are regarded as leading specialists in restoration, correction and support of motor functions, detection of motor dysfunctions and determination of motor potential, development and implementation of individual plan of physical rehabilitation in cooperation with other specialists (traumatologists, neurologists). Complex medical physical culture is important instrument at this stage, which is used in form of different motor activities for all age groups: it is needed for the young people as well as it is necessary and useful for elderly population. Medical gymnastics procedures promote restoration of physiological functions and totally reorganize organism in any diseases being done by special methodology. Medical physical culture increases effect of medicaments, reduces recovery time, activates metabolism, positively influences the cardio-vascular and respiratory system. Individual or group exercise therapy may be complemented by physiotherapeutic procedures and medical massage with daily use [2].

Experts emphasize that psychological adaptation is necessary for almost all members of ATO. In case of insufficient treatment, post-military symptoms may be relapsing and worsened later. Soldiers who survived after horrible war realities frequently suffer from insomnia, absence of emotion, irritability, sudden anger attacks, aggressiveness and phantom limb pain. They must undergo treatment in order to be normally adapted to peaceful life. Psychological rehabilitation is constituent part of medical and psychological as well as general physiological rehabilitation of war members undergoing treatment of injuries, contusions, traumas, burnings and psychological disorders. Centers of psychological rehabilitation are needed in all regions where recruitment to ATO area was done [6].

According to all former servicemen who were treatment-seeking, 54% needed medical rehabilitation, up to 30% were in need of physical one and 80% needed psychological rehabilitation. We addressed a question to psychologists who graduated pedagogical higher institutes, but they were inexperienced with **battle fatigue** militant traumas.

The Government has established a range of programs for complex medical rehabilitation of war members. Since November 2014, a network of medical institutions for providing health care for ATO victims has been founded. For example, separate hospital with 70 beds has been built in Irpin town, where servicemen with generally-somatic traumas can receive sanitation course (there are two departments – occupational pathology and alternative healthcare. In Lutsk, the Rehabilitation Center for Medical and Psychological Assistance to ATO Participants has started to work in the Regional Hospital for veterans and war disabled. The Rehabilitation Center has been organized by Military Clinical Center for patients with spinal cord injuries in Lviv. In Zakarpattia, the Center of Psychological Crisis Service is running. It was built in January 2014, firstly on the basis of Psychological Service of Maidan, and it is the Center of Treatment for all war veterans in the East of Ukraine now. The Center of Post-traumatic Rehabilitation for ATO soldiers is working in Kyiv [13]. Psychologists and rehabilitologists provide a complex rehabilitation for all injured, restore mental health, train patients how to become accustomed to new limb or its absence. It should be noted, that the Interagency Coordination headquarter operates under the Ministry of Defense. It includes representatives of the Central authority, members of the executive branch and security forces, volunteers. Coordination of rehabilitation process of all armies returned from ATO area relates to its authority [8].

Department of Psychology and Social Restoration at the Center of Psychological Rehabilitation and Treatment for ATO members works in the Chernihiv region. It has been built on the basis of the CPLA “Chernihiv Regional Neuropsychiatric Hospital” for war veterans who received course of rehabilitation. After being discharged from hospital, soldiers resume service in the army, but there is no psychological rehabilitation at military departments. The issue of the need to reinforce and intensify the complex of rehabilitation measures for military servicemen arose. Five qualified psychologists will work at the Service. Psychological and social restoration is being conducted in five fields: body-oriented therapy, art therapy, cognitive behavioral therapy, psycho-dynamic therapy, ATO members’ families counseling concerning the need for a psychological support and peculiarities of post-traumatic stress disorder [7].

Conclusion

The rehabilitation of victims is a long-term process which needs qualified professionals, amount of whom is limited nowadays. A particular medical specialty “Physical and Rehabilitation Medicine” must be developed, which is existed in the EU. A unique compulsory State system of complex war members rehabilitation must operate and be adequately financed with centers across all regions of Ukraine.

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Реферати

**КОМПЛЕКСНА РЕАБІЛІТАЦІЯ
УЧАСНИКІВ БОЙОВИХ ДІЙ**

Слухенська Р.В., Бірюк І.Г.

Метою роботи був аналіз актуальних проблем комплексної медичної реабілітації для людей, які зазнали різних видів травм (фізичних, психологічних) у районах військових дій та не можуть вирішувати проблеми адаптації та відновлення організму самостійно. Реабілітація військових – це довготривалий процес, для якого потрібні кваліфіковані фахівці, кількість яких обмежена в нашій країні. Необхідно створити окрему медичну спеціальність «Фізична і реабілітаційна медицина», яка існує в ЄС. Унікальна обов'язкова державна система реабілітації учасників воєнних дій повинна працювати і бути реально профінансована, з центрами у всіх регіонах України.

Ключові слова: комплексна медична реабілітація, військові дії, медицина, соціальна адаптація, медична система.

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**КОМПЛЕКСНАЯ РЕАБИЛИТАЦИЯ
УЧАСТНИКОВ БОЕВЫХ ДЕЙСТВИЙ**

Слухенская Р.В., Бирюк И.Г.

Целью работы был анализ актуальных проблем комплексной медицинской реабилитации для людей, подвергшихся различным видам травм (физических, психологических) в районах военных действий и не могут решать проблемы адаптации и восстановления организма самостоятельно. Реабилитация военных – это длительный процесс, для которого нужны квалифицированные специалисты, количество которых ограничено в нашей стране. Необходимо создать отдельную медицинскую специальность «Физическая и реабилитационная медицина», которая существует в ЕС. Уникальная обязательная государственная система реабилитации участников военных действий должна работать и быть реально профинансирована, с центрами во всех регионах Украины.

Ключевые слова: комплексная медицинская реабилитация, военные действия, медицина, социальная адаптация, медицинская система.

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**КОРОНЕКТОМІЯ ЯК СПОСІБ ХІРУРГІЧНОГО ЛІКУВАННЯ
РЕТЕНОВАНИХ ТРЕТІХ НИЖНІХ МОЛЯРІВ**

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У статті наведено результати ретроспективного аналізу архівного матеріалу та власних спостережень 32 клінічних випадків проведення коронектомії третіх нижніх молярів. Проведено систематизацію показань до проведення операції, дана характеристика особливостей перебігу післяопераційного періоду з акцентуванням уваги на необхідності рентгенологічного контролю та вимірювання відстані міграції коренів після оперативного втручання. Виникнення сенсорних порушень після коронектомії ЗНМ спостерігалось при С2-С3 положенні за класифікацією G.Pell, B.Gregory (1933) та при мезіоангулярному і вертикальному положенні за класифікацією G.Winter (1926). Середнє арифметичне значення відстані міграції коренів у групі спостереження становило 3,6 мм±1,69 за 12 місяців післяопераційного періоду. Оптимальним терміном повторного оперативного втручання з метою видалення коренів є інтервал від 12 до 24 місяців після коронектомії ЗНМ.

Ключові слова: нижні треті моляри, коронектомія, рентгенодіагностика, міграція коренів, післяопераційний період.

Робота є фрагментом НДР «Інтегративно-диференційоване обґрунтування вибору оптимальних методик оперативних втручань та обсягу лікувальних заходів при хірургічній патології щелепно-лицевої ділянки», номер державної реєстрації 0116U003821.

Кваліфіковане видалення третіх нижніх молярів (ЗНМ) залишається актуальною задачею на сьогодні і потребує індивідуального підходу щодо її вирішення з урахуванням можливих післяопераційних ускладнень. Складність відповідного завдання визначена цілою низкою об'єктивних та суб'єктивних умов і потребує напрацювання алгоритму надання хірургічної стоматологічної допомоги. Статистичні дані щодо виникнення нейросенсорних ускладнень представлені в сучасних виданнях підтверджують той факт, що зазначена проблема має важливе соціально-економічне значення, оскільки стосується переважно пацієнтів юнацького та молодого віку, які складають вагомий відсоток працездатного населення.

В попередній публікації [1] було зазначено, що останнім часом вибором стоматолога-хірурга дедалі частіше стає таке оперативне втручання як коронектомія зуба, яке розглядають як безпечне вирішення проблеми видалення ретенованих і дистопованих ЗНМ. Необхідно зазначити, що ця методика описана в літературних джерелах відносно нещодавно [3]. Аналіз літературних джерел свідчить про те, що методика знайшла широке застосування у зарубіжних фахівців, чого не можна стверджувати щодо стоматологічної практики в Україні. Іноземні науковці представили достатньо велику кількість статей з позицій доказової медицини за результатами клінічних спостережень [2,5].