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Clinical, Functional and Quality of Life Assessment of Patients with Spinal Pain Syndrome

Ocena kliniczna, czynnościowa i jakości życia chorych z zespołem bólowym kręgosłupa

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Abstract

The development of civilization leads to a continuous increase in the number of diagnoses of spinal pain syndrome in patients in each age group, thus leading to the need to develop new treatment standards. Spinal pain syndromes due to the often unknown etiology cause difficult diagnosis and introduction of effective therapy. That results in difficulties in causative treatment and thus sets pain as a leading problem in the therapy. Spinal pain syndromes are a complex clinical problem that may affect the patient's psychological and social state as well as that of their family. The result of the research carried out with the use of standardized scales in the course of the disease is the development of the patient's nursing process. The patient's assessment is holistic, it allows to determine the factors predisposing to the occurrence of the disease and the current state of the patient. The clinical, psychological, social as well as professional and social aspects are analyzed in a multidimensional way. The level of performing independent activities by the patient is determined by means of functional scales. Spinal pain syndromes as a global problem are also the subject of research on the quality of life of this group of patients. The essence of using these tools is the ability to correlate them with other tools. (JNNN 2017;6(4):170–173)

Key Words: clinical evaluation, functional assessment, quality of life, back pain syndrome

Streszczenie

Rozwój cywilizacji prowadzi do ciągłego wzrostu liczby rozpoznania zespołów bólowych kręgosłupa u pacjentów w każdej grupie wiekowej, tym samym doprowadza to do konieczności opracowywania nowych standardów leczenia. Zespoły bólowe kręgosłupa z powodu nieznanego często etiologii powodują utrudnioną diagnostykę oraz wprowadzenie skutecznej terapii. Wynikiem tego są trudności w leczeniu przyczynowym i tym samym stawia to ból jako problem wiodący w terapii. Zespoły bólowe kręgosłupa stanowią złożony problem kliniczny, mogący oddziaływać na stan psychiczny i społeczny pacjenta, ale także jego rodziny.

Wynikiem prowadzonych badań z użyciem standaryzowanych skal w przebiegu choroby jest opracowanie procesu pielęgnowania pacjenta. Ocena pacjenta jest holistyczna, pozwala określić czynniki predysponujące do powstania choroby oraz aktualny stan pacjenta. Wielowymiarowo analizuje się aspekt kliniczny, psychiczny, społeczny oraz zawodowy i towarzyski. Poziom wykonywania czynności samodzielnych przez pacjenta określany jest za pomocą skal funkcjonalnych. Zespoły bólowe kręgosłupa jako problem globalny stanowią także przedmiot badań na jakości życia tej grupy pacjentów. Istotą zastosowania tych narzędzi jest możliwość korelowania ich z innymi narzędziami. (PNN 2017;6(4):170–173)

Słowa kluczowe: ocena kliniczna, ocena czynnościowa, jakość życia, zespoły bólowe kręgosłupa

Introduction

The development of civilization leads to a continuous increase in the number of diagnoses of spinal pain syndrome in patients in every age group, thus leading to the need to develop new treatment standards. The diagnosis of a disease causing an increase in the pain of the spine depends on many factors, including lifestyle, professional work, lack of knowledge about work ergonomics and problems with maintaining proper posture. These factors result in reduced physical activity among patients with spinal pain syndrome. Studies show that changes in the spine associated with pain relate to or will affect that 80% of the world's population [1–3]. In Poland, epidemiological data show a relatively low rate of hospitalization associated with spinal pain syndrome, however, this number is still growing. That results in the need to increase financial resources for the prevention and treatment of this disease [4].

Spine pain syndromes due to the often unknown etiology cause difficult diagnosis and introduction of effective treatment. The reason for this are numerous disease symptoms, which are associated with weakening of the musculo-articular system. The development of technique and the aforementioned lifestyle generates weakening of the musculoskeletal system, which translates into the occurrence of diseases associated with impairment of motor functions. Thus, back pain syndromes constitute a complex clinical problem that may affect the patient's psychological and social state, as well as that of their family. It can be unambiguously argued that this is a civilization problem [4].

The basic therapeutic problem of spinal pain syndrome is the occurring pain, of various character and location. It is connected with the conduction of a pain stimulus, which may affect the functioning of the whole organism. Frequently, the etiology of pain is unknown or difficult to determine. That generates difficulties in the causative treatment and thus sets pain as the leading problem in the treatment of back pain syndromes. In literature pain is defined as an unpleasant sensory-emotional experience caused by actual or possible tissue damage. It is defined as a sensory process that sends information to the brain of a qualitative or quantitative nature. As an emotional process, however, it causes anxiety related to the actual fear in the mental sphere of an individual [5,6].

The appearance of pain is caused by a stimulus dependent on the innervation of tissues, the construction of the spine and areas at the spine. The basic factors causing the appearance of spinal pain syndromes according to research are the civilization backbone loads as well as insufficient adaptation of the spine to the vertical posture of the body. Based on numerous studies, not only the causes of pain are given, but also its effects. An important element of diagnostics is determining the

location and nature of pain, which translates into its origin and etiology [7].

The aim of research on patients with spinal pain syndromes is to awake confidence by the personnel conducting the analysis. This affects the patient's confidence and thus improves their mental state. The research on the assessment of the patient's functioning and the quality of life is designed to identify the patient's problems, develop the care plan and assess the actions taken. The assessment should be holistic, covering the physical, psychological and social aspects.

Patients should have knowledge about their disease and understand its essence. In addition, they should be aware of the prognosis and the therapy applied. An important issue is coping with the difficulties associated with the disease.

The scales and questionnaires used allow to assess the implemented nursing care and the therapy applied. This results in a more effective patient's treatment process as well as the possibility of avoiding the negative consequences of the therapy. The tools used in clinical, functional and the quality of life assessment enable a comprehensive assessment. Scientific research reflects the problems of the patient and their family as well as the care staff. They allow to correlate the applied in the assessment of different groups of patients. The factors predisposing the disease may be a reference in many studies. The basic differential diagnosis data include age, gender, place of residence, education, type of work performed, physical activity and comorbid diseases. The assessment covers everyday activities, physical activity as well as mental state. A properly conducted test ensures the reliability of the results obtained.

Review

The literature indicates numerous studies conducted to assess the patient with spinal pain syndrome, which are performed on the basis of scales and tests. The result of the research carried out with the use of standardized scales in the course of the disease is the development of the patient's nursing process. It allows for adjusting the means of implementation, planning nursing interventions and assessing the measures applied. This results in the development of standards in the care of the patient, which can protect them from the consequences of improperly selected care. It influences the improvement of the effectiveness of the nursing care plan implemented, based on the use of targeted scales for the subjective assessment of the patient. The conducted analyzes allow to establish proper contact with the patient, thus indicating the professionalism of the person conducting the research, at the same time raising the patient's trust.

The patient's assessment is holistic, it allows to determine the factors predisposing to the occurrence of the disease as well as to define the current state of the patient. On this basis, one can indicate the effectiveness of the therapy introduced, and thus eliminate the risk of inappropriate treatment methods.

The level of performing independent activities by the patient is determined by means of functional scales. Research in this area is carried out as a result of the universality and availability of these tools. They constitute a large group, the reason being their reliability, repeatability, ease of performance and communication skills. The basic tool used in nursing practice is the Barthel Scale with modifications, used for functional assessment of the patient. An example of a scale that defines care deficits in several assessments, from independence to dependence is the Functional Capacity Scale. The advantage of this tool is the ability to compare the outcomes, as a result of the possibility of repeating it in various stages of patient's treatment. Similarly, ADL and IADL scales are used, applied to plan and evaluate the care taken and the necessity to supplement them by medical personnel.

Numerous studies also undertake the analysis and measurement of life satisfaction assessment, referred to as the quality of life. Researchers assess factors determining people's functioning [8]. The term quality of life is not strictly defined, yet the literature states that it is the pursuit of perfection and fulfillment of life. It results from the need to strive for an ideal, professional and private fulfillment as well as a sense of life satisfaction in its many dimensions. Spine pain syndromes as a global problem are the subject of research on the quality of life of this group of patients. The basic factor subjected to these analyzes is pain. Clinical, psychological, social as well as professional and social aspects are analyzed in a multidimensional way. A holistic approach to the patient is the trend of research on the quality of life, describing it as a holistic approach to patient's problems [9,10].

A significant group of scales and questionnaires to assess the quality of life are the tools used for neurological and neurosurgical patients. The advantage of these scales is the application to the assessment of the clinical, mental and social status, while analyzing the quality of life and the evaluation of the therapy introduced. The essence of using these tools is the ability to correlate them with other tools. Examples of such scales include: Short 36-point health review (SF-36), Quality of Life Index or Life Quality Indicator. In addition, having conducted a study towards the quality of life after a certain period of time from the disease, one can additionally perform an assessment of depression, in the case of which a number of standardized tools are also available.

Scientific research indicates that patients with pain syndromes assess the functional efficiency, and thus the quality of life before diagnosis, much worse. The

authors of the studies assessing the quality of life of patients undergoing rehabilitation exercises state that the introduced treatment is effective and improves the quality of life in the group of patients subjected to the analysis [8]. This clearly affects functioning and thus improves professional, social and social life. The research results indicate that the symptoms of spinal pain syndromes predispose to mental disorders and diseases. This translates into limiting the performance of social roles [11]. An important role in the improvement of functioning is contributed to the assistance from other people, and thus the disease causes dependence on the support from those closest to the patient, their family and the therapeutic team. The composition of such a team is modified depending on the patient's deficits. Participation in the therapy can be compensated by: the doctor, nurse, physiotherapist, dietitian, psychologist, social worker. This affects the complexity of the help and thus meeting the patients' expectations [12].

Pain syndromes are strongly associated with the occurrence of pain. The influence of analgesics on the occurrence of pain is analyzed. The tests are carried out in two stages, before and after the application of pharmacological therapy. The pain or lack thereof affects not only the clinical condition, but also patients' mental condition. At the same time, it has a reference to the performance everyday activities. Scales provide groups of activities that are subject to the assessment. Correct functioning can be assessed, among others, through the analysis of hygienic operations, standing up, lifting and moving.

Conclusions

Spinal pain syndromes are one of the most common health problems in civilized countries, including Poland. As a result of the continuous increase in the number of diagnoses, they are defined as a global problem, leading to partial or total disability. Predisposing factors directly translate into exacerbation of symptoms [10,13,14].

The effect of limitations caused by spinal pain syndromes are problems in performing self-service activities. In addition, problems in the sphere of coping with the performance of everyday activities translate into a clinical, psychological and social aspect. The physical can affect mental symptoms and thus problems with social roles performance. Patients experience discomfort, isolate themselves from the environment and limit social contacts and interests.

An important role in conducting therapy of patients with back pain syndrome is to show mental support and provide a sense of security. The correct help from the medical staff and the patient's family has an impact on the improvement of the quality of life.

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