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Short Communication

Assessment of chronic pain

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Description of the pain

Pain is described by the International Association for the Study of Pain as "an unpleasant sensory experience associated with actual or potential tissue damage, or when such damage is the case".McCaffery*et al.* [1] describes pain as: if patient says "I have pain", it is true and it is exists. According to these definitions; Pain is a very important sign because it is a symptom of illness. However, urgent intervention is required, otherwise the patient becomes depressed, causing behavioral and emotional changes.In addition, trust between health personnel and patients who declare pain is a significant influence on diagnosis and treatment[2].

Classification of the pain

Pain types are classified in various forms, but the most widely used and clinically important classification is the classification according to the duration of the pain. Less than six months of pain is called acute, longer pain and repeated pain are called chronic pain. In the case of acute pain, the discomfort that occurs in the body is transmitted to the brain, although chronic pain occurs spontaneously outside the control of the brain. Nerve cells may send pain signals from the non-pain area. Since the effects of acute or chronic pain on the patient will be different, there must be differences in the definition of acute and chronic pain.Since acute pain does not have a continuity, the patient will be more affected than the pain intensity. That is, other effects that may occur on the patient other than the intensity or severity of the pain are temporary. For these reasons, the severity or intensity of the pain will be sufficient in most cases for treatment. However, the characteristic features of pain, causes and consequences are more important for chronic pain. Because chronic pain affects the quality of life and psychological condition of the patient negatively as well as affects his / her relatives negatively. In addition, well-defined tapered webs cause prolongation of the treatment and consequently increased economic losses and adversely affecting the quality of life of the patient. Since chronic pain is complex, it is of utmost importance to examine the behavior of pain, to elicit its causes, and to discuss the physical and psychological consequences of pain. In other words, chronic pain is a multi-dimensional feature.Given these distinctive features of acute and chronic pain, pain assessment forms should be used to provide a more comprehensive and versatile assessment of chronic pain, while simpler instruments, which are measure pain-intensity are important to define acute pain. The most commonly observed chronic pain is muscle aches, cancer pain and headaches.

Measuring of the pain and scales

Pain, which is a subjective experience, but it is transformed to objective form by using scales. After this the results are interpreted[3]. When assessing pain in clinical, scales that are usually easy and quick to interpret that only give information about pain severity and intensity are widely used These scales are called one-dimensional scales because they measure only pain severity. The most commonly known and used scales are verbal rating scales (VRS), numerical rating scales (NRS), and visual analogue scales (VAS). These scales should be used in when the patient with acute pain needs to be treated shortly before suffering too much pain, to determine the preoperative and postoperative anesthetic requirements, in the young children who cannot express themselves correctly, in paralyzed patients, in those with severe psychiatric illness, illiterate old people. It has been shown that these scales have high sensitivity to determine pain severity[4]. However, it cannot efficiently evaluate the complex structure of chronic pain because of the disadvantages of these instruments and because pain measures only as intensity. In the assessment of pain, it has been developed in the form of one-dimensional measurement tools that produce data on a numerical or interval scale, as well as multidimensional instruments that perform behavioral analysis of the pain. In addition, some evaluation methods for questioning the physiological responses that occur in the patient during pain are mentioned. At the beginning of the problems encountered in the correct definition of the pain, it comes to be in the subjective structure. The patient defines his pain experience based on self-report.

Measuring tools that describe the complex pain model include the Mc Gill Melzack Pain Questionnaire, the Dartmount Pain Questionnaire, the West Haven-Yale Multidimensional Pain Scale, the Reminder Pain Assessment Card, the Wisconsin Short Pain Schedule, and the Pain Detection Profile and Behavioral Patterns. However, the most comprehensive and most commonly used scale that forms the basis for the emergence of others is the Mc Gill Melzack Pain Questionnaire[5]. In this form, there are 4 separate sections and at the beginning of the form a short socio-demographic information is questioned. Developed in 1971, this scale has been used in over 100 studies but has not become very popular due to its long and time consuming nature. The presence of many of the questions on the original form restricted the use of this form, so in 1987 Melzack developed the McGill Pain Scale Short Form. The McGill Pain Scale Short Form has become advantageous because it provides information about the sensory qualities, severity and effect of the pain and the short duration of the application[6]. The validity and reliability study of the short form in Turkey was conducted in 2010[2]. In this scale the patient give self-grades, describes the sensory and perceptual characteristics of the pain, gives information about the duration and depth of the pain,

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and pain intensity is questioned with a 5-point Likert-type scale. A total of 79 adjectives are found to describe the pain features in this scale. However, some of these adjectives have the same meaning. Choosing synonyms may reduce the comprehension difficulty that may arise from perception or experience differences, but if used within the same scale it may be long and tedious for patients with pain and may also cause patients to have difficulty choosing a concept. It is also difficult for patients to perceive adjectives such as punishing, lethal, blinding. In addition, the meaning they impose on these adjectives can be influenced by their cultural and experiential differences. In addition, these adjectives, which are used to describe pain characteristics, were classified as sensory and perceptual.However, making this distinction clearly is not possible for some concepts. Group attributes of adjectives given by grouping at scale were not defined. Subgroups with 2-6 adjectives were formed in each and patients are asked to choose only one adjective from the subgroups. This scale can be revised by considering the following conditions;

- It can be done the redefinition of adjectives that show the characteristics features of pain,
- It can be remove of unnecessary adjectives,
- It can be examined the role of cultural differences,
- It can be reached universal concepts that define pain,
- Adjectives may grouped as severity of pain and effects of pain (Psychological, uneasy) instead of sensory and perceptual.
- And last, it may be more appropriate to make a grading the adjectives according to their severity in these two groups.

In addition, the questions in the other sections of the McGill Melzack Pain Questionnaire have been prepared in general terms and are open to improvement. Pain intensity was measured in a narrow range that is 5 'li Likert type. Besides these, the physical changes of the patient during the pain has not questioned and the observation and evaluation of the physician regarding these physical changes has not been taken into consideration.

West Haven-Yale Multidimensional Pain Inventory is one of the scales alternative to the McGill Melzack Pain Question Form, and has been proposed by Kerns *et al.*[7].This scale, which is a shorter, more classical and psychometric property than the McGill MelzackAgri Questionnaire, consists of 52 items of inventory divided into 3 sections. In the first section, there are 5 general dimensions that assess the interaction of pain, family and work functions and social support.In the second part, we discuss the reactions exhibited by patients to reveal pain and suffering, how others perceive it, third section has covered the frequency of being engaged in daily activities of patient with pain. Thus, the dimensions of chronic pain problems are evaluated [8,9].The drugs used, the effect of the treatment on pain, the beliefs about the cause of the pain, the descriptors determining the quality of the pain, the effects on the quality of life, the localization of the pain and the most severe pain, instant pain, and the average pain on a scale from 0 to 10 are evaluated within 5-15 minutes[5].The Dartmouth Pain Questionnaire is similar to the McGill Melzack Pain Questionnaire but further evaluates 3 influences. It has been investigated in behavior affected by pain. In this scale, non-painful functions and positive behaviors are taken into consideration[6].

Descriptor Differential Scale of Pain Intensity (DDSI) consists of 12 descriptors. The answers can have 21 different values between 0-20[10]. In addition to this, there are also measuring tools that examine the behavior caused by pain. They question behavioral changes that occur in the patient during pain. However, behavioral and physiological manifestations for patients who are able to give information about pain severity should not be used as pain severity alone. WPI (Widespread Pain Index) and PSD (Polysymptomatic Distress Scale) scales do not measure pain severity but measure the features and quality of the pain[11].

Since the severity and effects of pain are not be measured by mechanical devices, intensive studies are continuing on the scales. However, the pain threshold is measured by using an electrical stimulus or an algometer. It can be said that in people with different pain experience, pressure application or electrical stimulation may be insufficient to measure true pain threshold.

Recommendations

The subjective nature of the pain makes it difficult to assess of pain, and raises doubts about the reliability and validity of measurement. A scale that accurately assesses pain is not yet available[12]. However, when developing or revising a new scale, it is important to note that it is a scale that correctly defines pain characteristics, has high sensitivity to determine pain severity, is not bulky and is easily understood, and takes into account pain threshold and physician evaluation[13]. In addition, the personnel who use the tool to get a good result from the measuring tool should be knowledgeable or trained about the pain evaluation.

In conclusion, since chronic pain becomes a life style in the patient, examining the results of the pain increasing / decreasing factors with the severity of the pain and with the results of the pain will positively affect the patient's quality of life in the painful condition. However, for the better definition of the complex pain model, there is a need to develop a measurement tool that will analyze the model well and be easily understood by the patient.

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