

**83 - FACTORS THAT AGGRAVATE AND EASE CERVICALGIA: AN EVALUATION OF CONTEXT**

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**INTRODUCTION**

The lesions through repetitive effort (LER) denominated today as DORT (muscular disorder work related), represent one of the most polemic disease groups in Brazil and other countries. Of these disorders, the cervicalgia (cervical pain that goes down to the shoulders and may affect arms and hands) is the one that most affect workers, representing the first cause of incapacitation related to work on people less than 45 years old and the third cause of removal from work on people between 45 and 64 years old (KNOPLICH, 2003).

This pain which originates in the cervical region of the spine and is felt in the neck and in the nape (although it may project itself to the shoulder and the superior part of the arm) is caused or accentuated by certain movements or neck positions and may be followed by limitation of the movement of this body segment and sensibility to touch on the cervical spine. It may be developed after traumatism, considerable or insignificant (due to neck hypertension, during diving, forced chiropractic manipulations, etc.) or disc herniation, this being one of the problems that most affect workers; cause of many symptoms which may make continuity of labor activity impossible (KNOPLICH, 2003).

The cervical disc herniations, according to Steffenhagen (2003), generally occur between C6 and C7 and are rarer than the lumbar. In this case, the pain irradiates to the arms and fingers and may make them fall asleep and it is common for the patient to lose strength on the hands and let objects fall due to muscular weakening or lack of sensibility in these limbs.

It is important to emphasize that the chronic pain has different biological function during the pointed pain and generates incapacity for professional, social and familiar activities. The behavior of individuals with chronic pain characterizes by the small expression of physical signs of the organic disease and by the occurrence of depression, anxiety, insecurity, hostility, adoption of introverted positions, raise of somatic worries and the resting period, with severe financial and social consequences. Depression is associated, which causes chronic pain (ROCHA & JUNIOR, 2000).

Pain is described by the International Association of the Study of Pain as "unpleasant sensor and emotional experience, associated to real or potential tissue lesions". This concept implies that pain, as well as any other form of sensibility, presents discriminating and sensitive dimension (sensor experience), motivational and affective (emotional experience) and evaluated and cognitive (tissue lesion image). The symptom of pain is, most of the time, inadequately interpreted or is not recognized by the health professionals, investigators, health assistance entities and even by the sick people and their relatives (TEIXEIRA et al. 1995).

The daily life activities, leisure, sleep and appetite are significantly compromised due to pain, psycho affective abnormalities, manipulations and iatrogenesis induced during therapeutic procedures. Anxiety, depression and hypochondria install and accentuate themselves. The uncertainty towards future, fear of incapability, mutilation, loss of dignity and worsening of social and economical situation are causes and factors of aggravation of the clinic state. The persistent pain, physical incapacity, lack of hope, worries with incurability of the disease, disfiguration, the loss of importance in the social, familiar and professional environments, the economical losses, desperation and sensation of abandoning are factors that contribute for a worse quality of life (ibid).

With the purpose of improving biophysical and psychosocial health conditions of patients with cervicalgia, the goal of this study was to evaluate the factors that may come to aggravate or ease this pain.

**METHODOLOGY**

The current study was developed throughout a context evaluation, possessing as a data collecting instrument Psycho Functional Vertebral Spine Evaluation Method (Alexandre & Moraes, 2001) for the cervical region, specifically where it is mentioned the factors that worsen or improve the cervicalgia, analyzing the health historic of the individual participants (earlier diseases, posture and ergonomic aspects, psychosocial aspects) and the signs and specific symptoms, as irradiations, starting date (sudden or gradual), factors that worsen and heal the pain, associated factors, which treatment should be applied and whether or not the patient does it, specific physical head and shoulders exams, dynamic inspection and palpation.

The study was applied with 22 people, of both genders, between 30 and 50 years old, licensed by the INSS, with diagnosis of patients with cervical disc herniation, who go under treatment at the Santa Edwiges, in the city of Ananindeua – PA. These individuals, according to the sampling technology of Cochran (1995), formed a census group.

**ETHIC IN THE RESEARCH**

The project of this research was submitted to the Committee of Ethic in Research involving human beings from the University of Castelo Branco (UCB/RJ) and approved under the protocol of nº 0003/2009 and the data collecting had gone accordingly the resolution 196/96 of the National Consul of Health of the Ministry of Health. Thus, it was initially requested the authorization of the same (patients) so that the study could be developed, under the Free and Clarified Consent Term.

**STATIC TREATMENT OF THE DATA**

For static analysis, there were applied own methods of the descriptive statistics which consisted on the creation of frequency tables and event proportion evaluations. All the statistical processing was undertaken under the computing support of the BioEstat version 5 (Ayres et al. 2007) bio-statistical package.

**RESULTS AND DISCUSSION**

Of the 22 patients who went through the study, with medium age of 47,36 years, 18 (81,82%) were of the masculine gender and 4 (18,18%) of the feminine gender. They complained about pain, struggle in moving, functional dependence (they depended on other people to do determined activities), sadness, anguish, lack of will to relate either with the family or with friends,

among other characteristics.

The concept of pain as the International Association for the Study of Pain states, is the "unpleasant sensor emotional experience, associated with real or potent tissue lesions". This concept implies that pain, as any other form of sensibility, presents sensitive-discriminative dimension (sensor experience), affective-motivational (emotional experience) and cognitive-evaluating (tissue leisure image). The symptom of pain is, most of the time, inadequately interpreted or is not recognized by the Health Professionals, investigators, health assistance entities and even by the sick people and their relative (TEIXEIRA et al., 1995).

Pain, according to Teixeira et al. (1995), is one of the human being's biggest concerns since our existence. Numerous are the efforts taken in looking for mechanisms that justify its existence and procedures destined to control it. While the pointed pain constitutes an alert signal in the occurrence of tissue lesions or organic dysfunctions, the chronic pain does not show this biological value, but it is one of the most frequent reasons of temporary and definitive incapacity. It is through pain that the majority of lesions or organic dysfunctions manifest themselves. It is, without a doubt, the greatest motivation for seeking medical assistance and one of the greatest problems of modern society public health.

Therefore, it may be verified in Table 1, that 100% of the patients feel pain standing up, 95% report pain with physical effort and while sitting and 91% feel pain with any kind of movement. It was verified relief in 95% of the resting cases, 91% with medication and 77% with physical therapy and even with local heat and stretching exercises.

Table 1: Evaluation of worsening and relief on pain in the evaluation of context in (n=22) patients with cervical disc herniation

Evaluation of Context (%)	
<b>PAIN GETS WORSE</b>	
With physical effort	95%
With prolonged rest	77%
Standing up	100%
Sitting down	95%
Com deambulação	82%
With emotional tension	73%
With sports	5%
With movement	91%
Other	0%
<b>PAIN RELIEVES</b>	
Resting	95%
With local heat	64%
With physical therapy	77%
With medication	91%
With movement	41%
With prolonged exercises	36%
Other	0%

#### \*Binominal Test

According to Yeng & Teixeira (2004); Teixeira et al. (1995) and Walsh et al. (2004), the patients with chronic pain showed compromise in diverse aspects of their lives. Pain evokes emotions and a cascade of electrophysiological and functional modifications generating suffering, uncertainties, fear of incapacity and disfiguration, concerns with material and/or social losses, limitation in the development of professional, social and/or home activities. It also alters the emotional system, sleep, appetite, leisure and life quality. The psychosocial impacts and incapacities related to the pain become omnipresent and the patients distance themselves progressively of the perspectives of recovery and physical, professional and social rehabilitation. They present fear of unemployment and uncertainties as to future perspectives, extend the removal period, which makes it even more remote the possibility of reintegration within the society. The impact of this loss may be greater or not, depending on the functional context of these workers and their social-cognitive repertoire.

#### CONCLUSION

It may be concluded that the maintenance of a determined position, and even rest, for prolonged time, may worsen cervicgia and that there needs that the patients with this kind of pain try to keep the development of daily life activities, seeking interdisciplinary support, in which the doctor, physical therapist and the physical education professional have an essential role.

With that in mind, it is verified the necessity in intervening in this pain related state with the existing physical therapy resources, supported by the other professional of the health area with the goal of improving the life quality of these people.

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**FACTORS THAT AGGRAVATE AND EASE CERVICALGIA: AN EVALUATION OF CONTEXT****RESUME**

This study had the goal of evaluating which factors aggravate and which factors ease cervicalgia of individuals of both genders, between 30 and 50 years old, licensed by the INSS with diagnosis of cervical disc herniation. It was developed through an evaluation of context, with the physical functional vertebral spine evaluation method (Alexandre & Moraes, 2001) as the data collecting instrument, for the cervical region, concerning these factors. The results showed that 100% of the patients feel pain standing up, 95% report pain due to physical effort and sitting positions and 91% feel pain with any kind of movement. It was verified relief in 95% of the cases of rest, 91% with medicines e 77% with physical therapy, local heat and stretching exercises. It was concluded that the maintenance of given position and even, resting, for prolonged time, may worsen cervicalgia and that the patients with this kind of pain, need to keep practicing daily life activities, seeking interdisciplinary, in which, the doctor, physical therapist and the physical education professional have essential roles.

**KEY-WORDS:** evaluation, cervicalgia, pain.

**LES FACTEURS QUI AGGRAVENT ET QUI SOULAGENT LA CERVICOBRAQUIALGIE : UNE ÉVALUATION DE CONTEXTE****RÉSUMÉ**

Cette étude a eu pour objectif d'évaluer quels sont les facteurs qui aggravent et ceux qui soulagent la cervicobraquialgie des individus des deux sexes ayant entre 30 et 50 ans, dispensés par l'INSS avec le diagnostic d'hernie discal. Cela a été développé au travers d'une évaluation de contexte, ayant comme instrument de collecte de données Le Modèle d'Évaluation Physique-Fonctionnel de la Colonne Vertébrale (Alexandre & Moraes, 2001) pour la région cervical, dans ce qui fait référence aux facteurs à évaluer. Les résultats ont montré que 100% des patients sentent des douleurs étant debouts, 95 % relatent avoir de la douleur en pratiquant un effort et 91 % sentent des douleurs avec n'importe quel mouvement. Il a été constaté que le repos a provoqué un soulagement de 95% des cas, 91% avec des étirements et 77% avec de la Physiothérapie, réchauffement localisé et des exercices d'étirements. Cette étude en conclue que la maintenance d'une position déterminée, et même le repos durant un temps prolongé, peuvent empirer la cervicobraquialgie et qu'il est nécessaire que les patients avec ce type de douleur essayent de maintenir ses activités quotidiennes en cherchant des soins interdisciplinaires, où le docteur, le physiothérapeute et le professionnel de l'éducation physique a un rôle essentiel.

**MOTS-CLÉS :** Évaluation; Cervicobraquialgie; Douleur

**FACTORES QUE AGRAVAN Y QUE ALIVIAN LA CERVICOBRAQUIALGIA: UNA EVALUACIÓN DE CONTEXTO****RESUMEN**

Este estudio tuvo por objetivo evaluar cuales son los factores que agravan y cuales provocan alivio en una cervicobralgia de individuos de ambos sexos, con edades entre 30 y 50 años, con licencia médica por el Instituto Nacional de Seguridad Social del Brasil (INSS), con diagnóstico de hernia de disco cervical. Fue desarrollado a través de una evaluación de contexto, teniendo como instrumento de colecta de datos el Modelo de Evaluación Físico-Funcional de la Columna Vertebral (Alexandre & Moraes, 2001) para la región cervical, en lo tocante a tales factores. Los resultados mostraron que 100% de los pacientes sienten dolores en la posición de pié, 95% relatan dolor con esfuerzo físico y en la posición sentado y 91% sienten dolores con cualquier tipo de movimiento. Fue verificado un alivio en 95% de los casos con reposo, 91% con medicamentos y 77% con fisioterapia y con calor local y con ejercicios de alargamiento. Fue concluido que la manutención de determinada posición, y mismo el reposo por tiempo prolongado pueden peorar la cervicobralgia y que hay necesidad de que los pacientes con este tipo de dolor intenten mantener la realización de actividades de la vida diaria, buscando atendimento interdisciplinar, en el cual el médico, el fisioterapeuta y el profesional de educación física tienen un papel fundamental.

**PALABRAS LLAVE:** Evaluación, Cervicobralgia, Dolor.

**FATORES QUE AGRAVAM E QUE ALIVIAM A CERVICOBRAQUIALGIA: UMA AVALIAÇÃO DE CONTEXTO****RESUMO**

Este estudo teve por objetivo avaliar quais os fatores agravam e quais aliviam a cervicobraquialgia de indivíduos de ambos os sexos, com idade entre 30 e 50 anos, licenciados pelo INSS com diagnóstico de hérnia de disco cervical. Foi desenvolvido através de uma avaliação de contexto, tendo como instrumento de coleta de dados o Modelo de Avaliação Físico-Funcional da Coluna Vertebral (Alexandre & Moraes, 2001) para a região cervical, no que diz respeito a tais fatores. Os resultados mostraram que 100% dos pacientes sentem dores na posição em pé, 95% relatam dor com esforço físico e na posição sentada e 91% sentem dores com qualquer tipo de movimento. Foi verificado alívio em 95% dos casos com repouso, 91% com medicamentos e 77% com fisioterapia.e, ainda, com calor local e exercícios de alongamento. Concluiu-se que a manutenção de determinada posição, e mesmo repouso, por tempo prolongado, podem piorar a cervicobraquialgia e que há necessidade de que os pacientes com este tipo de dor tentem manter a realização de atividades da vida diária, buscando atendimento interdisciplinar, no qual o médico, o fisioterapeuta e o profissional de educação física têm papel essencial.

**PALAVRAS-CHAVE:** Avaliação; Cervicobraquialgia; Dor.

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