57 - THE IMPORTANCE OF HEALTH EDUCATION IN REHABILITATION VESTIBULAR - EXPERIENCE REPORT

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INTRODUCTION

The maintenance of postural balance is dependent on the integration between the visual, vestibular, somatosensory and auditory associated with the central nervous system. The vestibular system is stimulated by movements of the head with respect to gravity, therefore, its main function is to stabilize the head in space and in relation to the trunk (KLEINER; SCHLITTLES; SANCHEZ-ARIAS, 2010).

The involvement of one of these systems affects the body balance and can cause symptoms such as dizziness, vertigo, tinnitus, nausea, sweating, pallor, and postural instability (Mazzucato; BORGES, 2008). Dysfunctions in the vestibular system, the nervous system (central or peripheral), as well as alteraçõesno emotional state, may contribute to the onset of dizziness and imbalance, hindering the performance of activities that require quick movements of the head and trunk flexion (ROBERT, 1998; Cohen, 1994).

Vestibular Rehabilitation (VR) is based on the principle of neuronal plasticity in the CNS, and objective improvement of vestibular-visual integration during head movement and promotes visual stabilization (Morozetti ; GANANÇA ; Chiari , 2010) . The rehabilitation may promote complete cure in 30% of cases and different degrees of improvement in 85 % of patients. (Resende et al, 2003).

The RV is composed of exercises that stimulate the movement of the eyes, head and body in sitting and standing positions (ZEIGELBOIM et al, 2008). Its effects provide improved balance, gait, self-confidence, quality of life and decrease symptoms such as dizziness, vertigo and anxiety (RICCI et al, 2010).

Health education is a resource used to transmit scientific knowledge of health for the population to make disease prevention and health promotion (ALVES, 2011). Educational strategies are key to raising the awareness of individuals about the dysfunction, promote rehabilitation of habits and daily activities, aiming to prevent, minimize and manage the symptoms, and especially encourage autonomy and improved quality of life.

The purpose of this article is to present an experience report on a group of Vestibular Rehabilitation focusing on health education, and expose the results achieved with the proposal.

MATERIALS AND METHODS

This study was developed in the Physical Therapy Clinic at the University of valley in the city of Itajai, during the first half of 2013.

The VR group was created because of the growing demand for referrals. Initially established a screening ruled the following inclusion criteria for participation in the group of vestibular rehabilitation: referral presenting with clinical diagnosis of vestibular or labyrinthine, established by a medical professional, regardless of gender or age, ability to perform active movements head, trunk and upper limbs, a condition of participating in a meeting a week on the day and time scheduled and have signed term of informed consent. Individuals who did not meet these criteria did not participate in the VR group and were treated individually.

Regarding gender, the eleven individuals selected early in the first half of 2013, seven were female and four men. Antes starting activities with the group we performed a physical therapy evaluation consisting of history and physical examination. We evaluated postural deviations, the cervical range of motion, lifestyle, time onset of symptoms, occurrence of seizures, medication use, visual and auditory deficits, sleep disorders, emotional factors, and daily activities. Subsequently, started the group's activities, being carried out about ten meetings during the first half of 2013, once a week lasting 60 minutes each.

The sessions were conducted by academic staff in charge of supervision. At each meeting were used health education strategies to address different issues related to relevant aspects of vestibular dysfunctions and labyrinthine. In order to facilitate the understanding of topics were provided support materials such as posters, pictures, folders, and the human skeleton for viewing the body schema.

The organization of activities was based both on the literature, as the complaints and questions from participants. Thus, the activities carried out meetings were organized as follows:

Day 1: Evaluation physiotherapy after screening: history and physical examination.

Day 2: Presentation of the group, goals and strategies. Educational activities on: concept and labyrinthine vestibular disorders, anatomy and physiology of the vestibular system, factors involved in body balance. Apart from exercises of respiratory reabilitation.

Day 3: Educational activities about: causes and symptoms of vestibular dysfunction and labyrinthine. Breathing exercises and movement eye and orbit.

Day 4: Educational activities on: Factors that influence or trigger crises labyrinthine. Breathing exercises and eye movement and head rotation.

Day 5: Educational activities about: The influence of postural control. Breathing exercises, postural exercises and eye movement and head rotation.

Day 6: Educational activities about: Adaptations and ergonomic posture during everyday activities Performing breathing exercises, postural exercises and eye movement and head rotation.

Day 7: Delivery and discussion of the folders with the exercises performed in the meetings to perform at home.

Day 8: Educational activities about: Health determinants and risk factors that interfere in symptoms (diabetes, hypertension, and smoking). Breathing exercises, postural exercises and eye movement and head rotation.

Day 9: Educational activities about: The influence of the environment in maintaining balance. Conducting functional

proprioceptive training.

Day 10: Clarification of doubts and closing the group.

The exercises developed prioritize fit and postural control in order to reduce the risk of possible bodily imbalances. Additionally, the exercises listed were made from a mild progressing to a degree of greater complexity each call occurring in the seated position and then in the standing position. The interventions were based on the exercise protocol proposed by Cawthorne-Cooksey (1944 and 1946). During all sessions had exchange of experience and knowledge promoting greater interaction among group participants. The participants were informed about the exercises at home, always played during calls for better enforcement (without compensation, with respiratory control and a more appropriate body posture).

RESULTS AND DISCUSSION

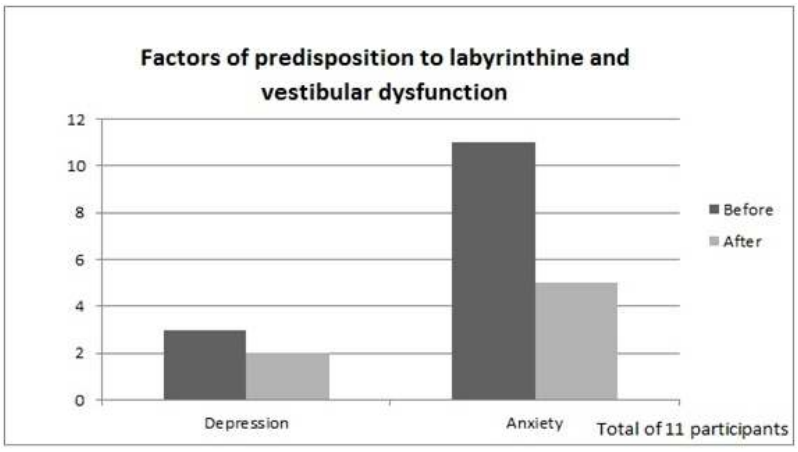
The vestibular rehabilitation group was composed of 11 participants, seven of which were female and five were male with a mean age of 59 years. All participants make use of medication during crises. The average onset of symptoms was nine.

With respect to daily activities, five individuals claimed remain long periods of time in the seated position and the other six participants mentioned stay longer in orthostatic position with maintenance of trunk.

Because these data were included in the meetings of exercises to improve posture pattern, especially cervical positioning. When we assume poor posture the center of gravity of the body also moves, and the imbalance increases, the posture is corrected balance improves by direct consequence. Sterling et al (2001) states that changes in posture and balance disorders caused by cervical seem to be related to the influx of abnormal cervical proprioceptive afferents heading into the stem nuclei responsible for postural control, this dysfunction found in some members of the group with cephalad position of anterior cervical flexion associated exaggerated arising from their daily activities, but to organize this position felt more secure and confident in relation to vestibular symptoms.

Regarding predisposing factors linked to emotional issues, only three patients reported having depression, however, all reported anxiety related to family issues or everyday situations.

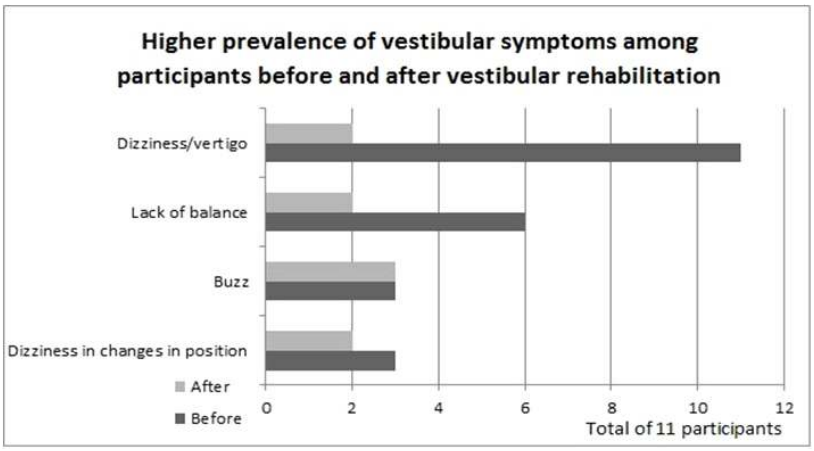
Framework that has been altered with interventions developed, as shown in the chart below:



Graph 1: Refers to the factors of predisposition to labyrinthine or vestibular dysfunctions presented by Group participants Vestibular Rehabilitation.

The balance tests were positive for all patients, and the presence of dizziness during head movements. The movements that predominantly generate the symptom of dizziness were bending and rotation of the neck, with worsening of symptoms when associated with flexion and trunk rotation.

The predominance of vestibular symptoms among participants were dizziness / vertigo, lack of balance, tinnitus and dizziness in changes in position.



Graph 2: Refers to vestibular symptoms of greater prevalence among the group participants before and after vestibular rehabilitation.

The graph shows better the symptomatic group participants vestibular rehabilitation, showing mainly the modification of frames dizziness. tontura. Evident early had improved, so the topic was approached with anxiety group. Zeigelboinetal (2008) reports that after the Vestibular rehabilitation in six patients for three months, twice a week, the patients improved not only the

functional aspect, but also the emotional aspect.

According to Knobel (2003), vestibular rehabilitation exercises produce improvement in symptoms of dizziness and tinnitus, as was observed in the group in question. This event is due to the intimate relationship of the vestibular system and auditory system, therefore the use of vestibular rehabilitation therapy for dizziness in some way promotes the reduction of uncomfortable tinnitus.

CONCLUSION

Vestibular rehabilitation can achieve the goal of promoting the visual stabilization hall, generating greater postural balance, since it is based on principles of neural plasticity directed to habituation and adaptation. However, it is possible to infer that the lack of knowledge about the labyrinthine and vestibular dysfunction, including the causes, triggers or interference on the symptomatology, may contribute to worsening of the condition. In this sense, the reeducation of life habits, acquiring better postural awareness and control of anxiety increase the chance of success of vestibular rehabilitation. It is believed therefore that rehabilitation should always be tied to health education interventions to achieve more satisfactory results in the quest for autonomy in health of individuals with vestibular dysfunction and labyrinthine.

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THE IMPORTANCE OF HEALTH EDUCATION IN REHABILITATION VESTIBULAR - EXPERIENCE REPORT

ABSTRACT

Introduction: The maintenance of postural balance is dependent on the integration between the visual, vestibular , somatosensory and auditory. The disharmony between these systems can lead to various disorders, as in cases of labyrinthine and vestibular dysfunction, triggering symptoms such as dizziness, vertigo, tinnitus, nausea and postural imbalances. Materials and methods: This study was developed in the physiotherapy clinic at the University of Valley of Itajaí, in Itajaí involving eleven patients with labyrinthine or vestibular dysfunction . All patients underwent an initial evaluation and later attended weekly meetings lasting 60 minutes during the first half of 2013, making a total of ten meetings. During the weekly meetings were conducted health education strategies and exercises designed to vestibular dysfunction. Results: After ten meetings we observed a decrease of complaints , mainly from bouts of dizziness and anxiety of staff, as well as greater knowledge about the labyrinthine and vestibular dysfunction. Conclusion : It was possible to verify that the knowledge about the factors that influence or trigger the labyrinthine and vestibular dysfunction associated with postural exercises and balance positively influence the daily lives of people who present labyrinthine and vestibular dysfunction .

KEYWORDS: body balance , vestibular rehabilitation , health education .

L'IMPORTANCE DE L'ÉDUCATION DE SANTÉ À RÉHABILITATION VESTIBULAIRE - RAPPORT D'EXPÉRIENCE

RÉSUMÉ

Introduction: Le maintien de l'équilibre postural dépend de l'intégration entre le visuel , vestibulaire , somato-sensoriel et auditif. Le désaccord entre ces systèmes peut entraîner divers troubles , comme dans les cas de dysfonctionnement labyrinthique et vestibulaire , provoquant des symptômes tels que des étourdissements , des vertiges , des acouphènes , des nausées et des déséquilibres posturaux. Matériel et méthodes: Cette étude a été élaborée à la clinique de physiothérapie à l'Université de Vale do Itajaí Itajaí en impliquant onze patients atteints vestibulaire ou labyrinthique . Tous les patients ont subi une évaluation initiale et, plus tard assisté à des réunions hebdomadaires de 60 minutes pendant la première moitié de 2013, soit un total de dix rencontres . Au cours des réunions hebdomadaires ont été menées stratégies et des exercices destinés à un dysfonctionnement vestibulaire éducation à la santé . Résultats: Après dix réunions , nous avons observé une diminution des plaintes , principalement en provenance des vertiges , et une amélioration de l'ajustement postural et une plus grande

connaissance du dysfonctionnement labyrinthique et vestibulaire. Conclusion: Il est possible de vérifier que les connaissances sur les facteurs qui influencent ou déclencher le dysfonctionnement labyrinthique et vestibulaire associée à des exercices posturaux et équilibrer positivement influencent la vie quotidienne des personnes qui présentent un dysfonctionnement labyrinthique et vestibulaire.

MOTS-CLÉS: dysfonctionnement de labyrinthe / vestibulaire; rééducation vestibulaire; éducation à la santé.

LA IMPORTANCIA DE LA EDUCACIÓN PARA LA SALUD EN REHABILITACIÓN VESTIBULAR - INFORME DE EXPERIENCIA

RESUMEN

Introducción: El mantenimiento del equilibrio postural depende de la integración entre lo visual, vestibular , somatosensorial y auditiva. La falta de armonía entre estos sistemas puede provocar diversos trastornos , como en los casos de disfunción laberíntica y vestibular, provocando síntomas como mareo , vértigo , tinnitus, náuseas y desequilibrios posturales. Material y métodos: El estudio se desarrolló en la clínica de fisioterapia de la Universidad de Vale do Itajaí Itajaí en involucrar a once pacientes con vestibular o laberíntica . Todos los pacientes fueron sometidos a una evaluación inicial y más tarde asistió a reuniones semanales de duración de 60 minutos durante la primera mitad de 2013 , lo que hace un total de diez reuniones. Durante las reuniones semanales se llevaron a cabo las estrategias y ejercicios diseñados para la disfunción vestibular educación para la salud . Resultados : Después de diez reuniones se observó una disminución de las quejas , principalmente de episodios de mareos, y una mejora en el ajuste postural y un mayor conocimiento acerca de la disfunción laberíntica y vestibular. Conclusión : Se pudo comprobar que el conocimiento acerca de los factores que influyen o activar la disfunción laberíntica y vestibular asociada con ejercicios posturales y equilibrar positivamente influyen en la vida cotidiana de las personas que presentan disfunción laberíntica y vestibular.

PALABRAS CLAVE : Disfunción laberinto/vestibular; rehabilitación vestibular; educación para la salud.

A IMPORTÂNCIA DA EDUCAÇÃO EM SAÚDE NA REABILITAÇÃO VESTIBULAR – RELATO DE EXPERIÊNCIA

RESUMO

Introdução: A manutenção do equilíbrio postural é dependente da integração entre os sistemas visual, vestibular, somatossensorial e auditivo. A desarmonia entre estes sistemas pode levar a diversos comprometimentos, como nos casos de disfunções labirínticas e vestibulares, desencadeando sintomas como tontura, vertigem, zumbido, náuseas e desequilíbrios posturais. Materiais e métodos: O presente estudo foi desenvolvido na clínica de fisioterapia da Universidade do Vale do Itajaí no município de Itajaí, envolvendo onze pacientes com diagnóstico de disfunção vestibular ou labiríntica. Todos os pacientes passaram por uma avaliação inicial e posteriormente participaram de encontros semanais com duração de 60 minutos, durante o primeiro semestre de 2013, perfazendo um total de dez encontros. Durante os encontros semanais foram realizadas estratégias de educação em saúde e exercícios direcionados a disfunção vestibular. Resultados: Após dez encontros foi possível verificar uma diminuição das queixas, principalmente das crises de tontura, além de uma melhora no ajuste postural e maior conhecimento a respeito das disfunções labirínticas e vestibulares. Conclusão: Foi possível verificar que o conhecimento a respeito dos fatores que interferem ou desencadeiam as disfunções labirínticas e vestibulares associado a exercícios posturais e de equilíbrio influenciam positivamente o cotidiano das pessoas que apresentam disfunções labirínticas e vestibulares.

PALAVRAS-CHAVE: disfunção labiríntica/vestibular, reabilitação vestibular; educação em saúde.