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Mots clés : Troubles de déglutition ; Personnes âgées ; Accident vasculaire cérébral ; Qualité de vie ; Éducation thérapeutique

Les troubles de la déglutition chez la personne âgée sont fréquents dans les suites d'un accident vasculaire cérébral. Ils en représentent un facteur pronostic majeur.
Objectifs.– L'objectif principal était l'observation du suivi à domicile des recommandations de prise en charge des troubles de déglutition. Les objectifs secondaires étaient le suivi de l'évolution des troubles de déglutition et de l'efficacité de la prise en charge.
Matériel, patients et méthode.– Étude prospective, descriptive, avec inclusion, à leur sortie du service de soins de suite et de réadaptation Gériatrique du CHU de Bordeaux, de tous les patients pris en charge dans les suites d'un AVC. Le recueil de données à M1 et M3, a été réalisé à l'occasion d'une consultation simple pour les patients ne présentant pas de trouble de déglutition à l'inclusion ou lors d'un bilan en hôpital de jour pour les autres. Tous les patients sortis du service entre le 01 janvier et le 30 avril 2012 ont été inclus. Nous avons recueilli à l'inclusion des données concernant les co-morbidités, les déficiences et limitations d'activité, ainsi que les complications précoces et la prise en charge des troubles de déglutition. À M1 et M3, nous avons ajouté les paramètres nutritionnels et un score de qualité de vie.
Résultats.– Nous avons inclus 41 patients (âge moyen 83,7 ans), dont 78 % présentaient des troubles de déglutition à l'inclusion. Les traitements proposés étaient : une adaptation de texture de l'alimentation solide et des boissons, avec des « fiches techniques » et des entretiens oraux pour support. À un mois, 22,2 % des patients inclus avec des troubles de déglutition ont présenté une pneumopathie d'inhalation. Les recommandations de prise en charge ont été mieux suivies à domicile qu'en institution. À trois mois, le score de qualité de vie était significativement inférieur en cas de troubles de déglutition persistants, et la perte de poids était significative également.
Conclusion.– La prise en charge des troubles de la déglutition nécessite une meilleure formation des personnels soignants (notamment en institution), et l'optimisation des supports d'information pour le suivi à domicile. Une démarche d'éducation thérapeutique spécifique est nécessaire.

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Oral communications
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CO28-001-e

Maintaining functional aptitudes of the aged adults in institutional health care settings

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Keywords: Institutionnalization; Deconditionning; Older adult

Introduction.– Admission in an institutional setting, either a hospital or a long-term care facility constitutes a risk of functional decline for older and vulnerable adults. At the hospital, this phenomenon occurs even if there is resolution or stabilization of the acute condition having justified the hospitalization. In the long-term facility, it occurs in a way disproportionate to the consequences expected for the initial pathologies. They result from processes of care and an environment not adapted to the characteristics of the patients, which together induce and reinforce this dysfunctional syndrome. The rupture with the activities of daily life, some standardized clinical practices applied without discernment, the many constraints to mobility, the ambient depersonalization and idleness contribute.
Observation.– On one hand, the model of adapted approach of care in the hospital and on the other hand that of the restorative care in long-term care facilities, propose to reconsider clinical practices in order to maintain the residual capacities of these persons. The level of risk can be detected precociously by an evaluation and a systematic monitoring of components of health, which prove to be predictors of the functional decline. The mnemotechnical tool AINÉES, which targets these risks, is used for this purpose. Preventive (and therapeutic) interventions respectively systematic, specific or specialized will be carried out according to whether the gradient of the risk is defined as being: light, moderate or severe. In a long-term care facility it is a matter of promoting the most optimal functional autonomy to meet the activities of daily life, continence and mobility. The individualized care plan, which engages in a collaborative partnership between the patient, his family and the professional team, constitutes the foundation of the intervention. This is an objective, measurable, dynamic process, which requires monitoring and continuous evaluation.
Discussion.– The philosophy and the processes which underlie the maintenance of the functional aptitudes in institutional health-care facilities will be discussed in view of empirical and evidence- based published data.

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Evaluation of the relationship between dynamic balance and stance phases during gait in normal ageing

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Keywords: Balance; Gait; Ageing; Posturography

Introduction.– In old subjects, keeping a good balance is fundamental to maintain a functional independence. The purpose of this study was to evaluate the relationship between dynamic standing balance and single and double support phases during gait.
Method.– Twenty asymptomatic subjects over 60 years old (mean age 70.2 ± 10.5) and twenty subjects under 60 years old (mean age 31.7 ± 10.5) participated in this study. Static balance, dynamic balance and spatiotemporal gait parameters at spontaneous gait speed were recorded using a WinFDM Zebris platform. Antero-posterior (AP) and circular (Circ) dynamic balance parameters were quantified. Anthropometric measures were taken. A cognitive test (Codex) was performed in the group of older subjects.
Results.– A univariate analysis showed a change in the spatiotemporal gait parameters and balance with age. A multivariate analysis showed that most of the changes were related to pathological changes and in particular to an impairment of cognitive functions (Codex). Furthermore, relationships were found between the AP index and the percentage of double support phase ($r = -0.55$; $P < 0.05$) during spontaneous gait.
Discussion and conclusion.– The results of this study showed that there is a correlation between dynamic balance and the percentage of double support phase during spontaneous gait. The change in spatiotemporal gait parameters with age is not directly related to ageing but to pathological conditions. AP and Circ dynamic balance parameters could be predictor elements of a risk of falls.
Further reading
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Gait instability measured by dual task gait test and leukoaraiosis

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Keywords: Gait instability; Dual task; Leukoaraiosis

Objective.– Gait unsteadiness is considered as the first step of major health concerns such as fall and dementia. Gait dysfunction has to be measured under dual task gait test (DTGT). The aim of this study was to investigate the relationships between DTGT and brain magnetic resonance imaging (MRI).
Material and methods.– Data were collected through a Gait Instability Network including DTGT. Twenty-five patients aged less than 76 years old were tested (age: 71 ± 5 years, F: 8, M: 17, MMSE: 28 ± 2).
Methods.– The assessment includes five successive steps: auto questionnaires, nurse evaluation, clinical balance tests, cognitive tests, medical examination, and DTGT. Gait analysis was provided by a three-axis accelerometer (Locometrix), three variables were selected: walking speed (WS), stride frequency (SF) and stride regularity index (SR). The Dual Task (DT) consists in walking and backward counting one by one from fifty. MRI including cortex trophycity, hippocampal Scheltens score, and age-related white matter changes (ARWMC) was performed under blind condition.
Results.– Under DT condition, each gait variable decreases significantly. WS: from1.13 ± 0.24 to 0.98 ± 0.23 m/s ($P = 0.02$), SF: from 0.91 ± 0.09 to 0.79 ± 0.13 Hz ($P < 0.001$), SR: from 211 ± 51 to 160 ± 60 dimensionless ($P < 0.002$). Out of 25 patients, three had a vestibular disorder, one had post-stroke effects. No clinical explanation can be found for 21 patients other than hippocampal atrophy (Scheltens score 1.4 ± 0.6), and/or leukoaraiosis (ARWMC score: 4.3 ± 4.3).
Discussion.– These results illustrate the interest of measuring not only walking speed and stride regularity, but also stride frequency under DTGT, and raise the question of the role of leukoaraiosis in gait instability [1].
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Postural regulation is deteriorated in early Alzheimer disease

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Keywords: Alzheimer disease; Dual task; Posturographic analysis

Objective.– The aim of this preliminary study is to show that in early Alzheimer disease there are modified stabilometric measurements featuring this disease. Our hypothesis is that the postural behavior is influenced infra-clinically by the deterioration of the cognitive component.
Materials and methods.– It is a prospective study comparing the sway on posturography (Medicapteurs plateform) of two groups of subjects above 65 years: a group of nine Alzheimer disease patients (mild to moderate: MMS above 18/30), and a group of healthy subjects. Recording was performed in usual conditions and during a dual task (counting backward 100 minus 7).
Results.– There was no significant difference between the two groups, even on the clinical stance. On the other hand, results of the discriminant analysis based upon the different stabilometric parameters allow for a clear distinction between the two groups: area during dual task ($P < 0.002$), and the medio-lateral sway eyes closed ($P < 0.003$).
Discussion.– There is a premature ageing of posture that begins infra-clinically in Alzheimer disease patients compared to the healthy subjects. The deterioration of posture during dual task is confirmed by a recent study showing that, the dual task could be used for an early diagnosis of Alzheimer disease [1]. Also, the hip strategy featured by the medio-lateral sway's impairment has been reported as correlated to cognitive impairment in Alzheimer disease. Our results partly concur with Suttanon et al. [2] for whom the deteriorated stance during dual task is correlated to fall risk. The posturographic analysis using a dual task could be a promising tool to detect the early postural control deterioration in Alzheimer disease.
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Role of visuo-spatial work memory and of postural control in older subjects with or without pathologic conditions

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Compliance with recommendations of management of swallowing disorders in the elderly after stroke

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Keywords: Swallowing disorders; Elderly; Stroke; Quality of life; Patient education

Swallowing disorders in the elderly are common in the aftermath of a stroke. They represent a major prognostic factor.
Objectives.– The main objective was the observation of home monitoring recommendations for management of swallowing disorders. The secondary objectives were to monitor the evolution of swallowing disorders and the effectiveness of care.
Materials, patients and methods.– Prospective and descriptive study, with inclusion, leaving the service acute care and rehabilitation Geriatric Hospital of Bordeaux, of all patients treated in the aftermath of a stroke. Data collection to M1 and M3 was carried out during a single consultation for patients without swallowing disorder at baseline or during an assessment in a day hospital for others. All patients left the service between 1 January and 30 April 2012 were included. We collected the inclusion of data on co-morbidity, disability and activity limitations, and early complications and management of swallowing disorders. At M1 and M3, we added nutritional parameters and quality of life score.
Results.– We included 41 patients (mean age 83.7 years), 78% had swallowing disorders at baseline. Proposed treatments were: an adaptation of texture of solid foods and beverages, with ''sheets'' and oral interviews for support. At 1 month, 22.2% of the patients with swallowing disorders showed aspiration pneumonia. Recommendations supports were better monitored at home and in institutions. At 3 months, the quality of life score was significantly lower in cases of persistent swallowing disorders, and weight loss was also significant.