Keywords: Osteoporosis; Hip fracture; PMR; Inpatient; Outpatient; Quality of life
Osteoporotic hip fractures are one of the major causes of impaired quality of life, increased morbidity and mortality risk. The goal of PMR programmes of care is to help the patient to return to the highest level of function and independence as possible, while improving the overall quality of life, decreasing pain, preventing additional fractures, and minimizing further bone loss.

Our aim was to assess the affectivity of inpatient PMR programmes of care in our department among osteoporotic patients with hip fracture, and to follow them after 1 year of outpatient PRM.

Sixty-two osteoporotic participants, with previous hip fracture who were admitted to our hospital for PMR programmes (7 men, 55 women, age 75.9 ± 9.2 years) because of osteoporotic fracture or underlying disease causing osteoporosis have been reviewed. PMR programmes were designed to meet the needs of the individual patient, including diet supervision, calcium and vitamin D supplementation, drugs against osteoporosis, physiotherapy, ergotherapy, falling prevention, etc. The programme effectiveness was tested by functional assessments before and after the inpatient procedure: QUALEFFO (Quality of Life Questionnaire of the European Foundation for Osteoporosis), FIM (functional independence measure), Beck depression inventory test, TUG (timed up and go test, sec), andVAS (visual analogue scale).

At the admission vs at the end of inpatient procedure: QUALEFFO 54.7 ± 11.5 vs 49.1 ± 12.9, Beck 35.0 ± 2.5 vs 30.0 ± 10.4, TUG 29.2 ± 14.2 vs 24.3 ± 15.2, VAS 76.0 ± 11.5 vs 61.1 ± 13.9, P < 0.001 (paired sample t-test) for each parameters, FIM 51.7 ± 7.6 vs 100.0 ± 12.6, P = 0.168. No further improvement was detected during the one year of outpatient rehabilitation according to the QUALEFFO values: 49.1 ± 12.9 vs 49.2 ± 13.6 (at the inpatient discharge vs one year after outpatient rehabilitation).

Adequate inpatient PRM programme improved physical and psychosocial functions, as well as quality of life among our osteoporotic patients after hip fracture, however no additional functional improvement were detected after one year of outpatient programmes.

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The segmental exclusion of the hand: An example of the learned-non use phenomenon

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Keywords: Exclusion; Learned-non used

Objective— To study the behavior of digital segmental exclusion on the hand traumatized population and the consequences.

Material— Interview (discomfort, pain, functional consequence), trophic review, joint, functional assessment of hand (sheet 400 points), body image (digital gnosis, praxis), electrophysiological investigations (PEM, PES, PEC).

Patients and methods— Thirty-three patients (mean age 43 years) who recruited during one year at the department of the hand surgery. The inclusion criterion was the presence of exclusion digital identified clinically. The original triggers were traumatic (for 2/3 of cases), infectious, RSDS, and simple immobilization.

Results— The average installation of the exclusion period was 3 months. At the questioning, the exclusion was not seen initially. Topography dominated the index (50% of cases). The trophic review reported vasomotor disorders. Range of motion was normal in passive and active reduced. Achieving the sensitivity varied according to the lesions (paresthesia, dyesthesias, allodynia). Examination of the body schema reported the anosognosia exclusion in the initial phase and finger agnosia, the functional assessment (400 points) highlighted the exclusion tests manipulating objects. Measurement of cognitive evoked potentials (P 300) found a longer latency (331 vs. 405 healthy hand and pathological).

Changes at 1 year noted a decline in the exclusion of 12 patients (36.3%) and no recovery in 21 patients (63.7%).

Discussion— Our study showed that the behavior of digital exclusion is a fast installation phenomenon and may not be initially perceived by the patient. It is associated with a limitation of active ranges of sensory disorders with cognitive functional impact.

The application of the model of “learned-non use” for interpreting the occurrence of the phenomenon of digital exclusion: the involvement of cortical reorganization and the compensatory motor pattern have like a clinical impact on the digital gnosis alteration of gnosia and the failure of the reuse attempts (incoordination, lack of strength, dexterity). Inactivity by lesion of the peripheral nervous system generates behavior modification unsuitable, similar to those observed in a central nervous system.

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Correlation of hand and foot force control and cervical spinal cord structure in cervicobrachial neuralgia

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Keywords: Cervicobrachial neuralgia; Diffusion tensor imaging; Fractional anisotropy

Objective— We investigated early occurring force control deficits in cervicobrachial neuralgia (CBN) and related these changes to cervical spinal cord structure.

Patients and methods— Twenty CBN patients and a group of control subjects of similar age were included. A visuomotor tracking task was used to measure force control at low absolute force levels (3, 6 and 9 N) in the precision of the hand and foot. Diffusion tensor imaging (DTI) and conventional T2-weighted MRI were performed to assess structural integrity of the cervical spinal cord. DTI parameters were extracted from the cervical spinal cord (C1-C5).

Results— All patients presented cervical pain but few had other neurological symptoms. Groups were similar in clinical assessments of maximal grip strength and dexterity. Force tracking showed 35% greater error in both hand and foot tasks in patients compared to controls (P = 0.008). All subjects performed the hand task with less error compared to the foot task (P < 0.001). Mean release duration was longer in patients than in controls (133 ± 30 ms vs. 96 ± 34 ms, P > 0.001) and it was 30 times longer in the foot in both groups. DTI revealed lower mean spinal cord fractional anisotropy (FA) in patients compared to controls [0.50 ± 0.03 vs. 0.52 ± 0.03, P = 0.008]. In patients, mean error during force tracking (hand and foot combined) correlated negatively with FA (r = −0.47, P = 0.04).

Discussion— Force control deficits were found in CBN patients and it was related to reduced FA of the cervical spinal cord. These findings suggest that force tracking may be clinically useful in detecting and quantifying subtle alterations in the spinal cord structure in CBN, and that its treatment should integrate the lower limb.

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An analysis of the burden of musculoskeletal conditions in France

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Keywords: Musculoskeletal condition; Burden;法国
Materials and methods
to provide a tool prognosis.
occurrence of a subsequent worsening of disability (evaluated after three years)
Introduction
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Keywords: Disability; Handicap; Burden of disease; Rheumatic disease; Musculoskeletal disease; ICF; Chronic condition
Background.– Representative national data on disability and chronic diseases are becoming increasingly important in helping policymakers decide on public health strategies. We assessed the contribution of different rheumatic and musculoskeletal diseases (RMDs) to disability in France.
Methods.– Data on RMDs, including osteoarthritis (OA), low back pain (LBP), neck pain, inflammatory arthritis, spine deformity, and osteoporosis, and on disability were extracted from the Disability-Health Survey, a national study including 29,931 persons representative of the French population living in household. Disability categories of the common ICF core set for RMDs, including activity limitations, participation restrictions, and environmental factors, were considered for the analysis. Diagnosis and disabilities were self-reported. We assessed the individual risk of being disabled when having RMDs using Odds ratio, and the societal impact of RMDs using average attributable fraction (AAF) to account for comorbidities.
Findings.– Around 17,300,000 persons reported RMDs in France. LBP (12.5% of the French population [95% confidence interval: 12.1; 13.1]) and OA (12.3% [11.8; 12.7]) were the most prevalent RMDs. At an individual level, people reporting inflammatory arthritis were twice more limited for all activities of daily living than people without; those with OA for walking (adjusted OR 1.93 [95% confidence interval: 1.68; 2.21]) and carrying objects (1.74 [1.5; 2.01]); those with LBP with the fact to change job because of a health problem (2.16 [1.04; 4.5]). From a societal perspective, OA was the main contributor of activity limitations: 22% of difficulties for walking, and 12.8% for dressing were attributable to OA in France. Changing job was mainly attributable to neck pain (AAF 13%) and LBP (11.5%). Spine deformity was the main contributor to all disability categories before 20 years old. The impact of osteoporosis was low.
Discussion.– RMDs are highly prevalent and have a significant impact on activity limitations and participation restrictions, suggesting that more efforts should be made to improve care and research in these chronic diseases.
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Assessment of fatigue in rheumatoid arthritis: Experience of physical medicine Casablanca
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Keywords: Rheumatoid arthritis; Fatigue
Introduction.– Rheumatoid arthritis (RA) is an inflammatory disease responsible for pain, deformity and joint destruction leading to functional disability. The RA patients often complain of fatigue existing at all stages and increasing during flares, constituting a factor in the deterioration of the quality of life.
Objective.– This study aimed to determine the predictive value of fatigue on the occurrence of a subsequent worsening of disability (evaluated after three years) to provide a tool prognosis.
Materials and methods.– Sixty-eight patients followed in the service of Physical Medicine and Rehabilitation Functional received an assessment of fatigue through three questionnaires: visual analogue scale of 100 mm, the medical outcomes study short-form 36 (SF36) scale, multidimensional assessment of fatigue (MAF).
Results.– Of the 68 patients, 70% had a higher fatigue V AS 50 mm, 54% had severe fatigue index greater than 30 for the MAF. A statistically significant relationship was demonstrated between a high level of physical fatigue and worsening of disability.
Discussion.– The assessment of fatigue is difficult because psychological factors are involved and physical. The majority of the measurement tools used in research or clinical practice based on self-assessment format, but this assessment is primordial for monitoring, dose adjustment and determining the prognosis of RA.

Further reading
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Evolution of locomotor performances in HIV-1 infected adults included in the ANRS CO3 Aquitaine cohort
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Objective.– To study the evolution of locomotor performances in HIV-1 infected adults included in the ANRS CO3 Aquitaine cohort.
Patients and methods.– In this prospective observational study, locomotor performances were assessed with the six-minute walk distance (6MWD) and the five-times-sit-to-stand test (5STS), at baseline and after 2-year follow-up. The evolution of locomotor test results over time and the determinants of 5STS time were studied in linear mixed effects regression models.
Results.– Three hundred and fifty-four patients (81% men, median age 48 years) were included at baseline and 178 had a follow-up visit after 2 years. At baseline, median baseline 5STS time was 9.8 s, and median 6MWD was 549 m. At follow-up, 31% had a deterioration in 5STS time of at least 2 s, and 43% had a decrease in 6MWD of at least 25 m. Overall, mean deterioration was +0.24 s/year (P = 0.007) for 5STS time, and –11 m/year (P < 0.0001) for 6MWD. Older age was associated with worse baseline 5STS time (+0.47 s per 10-year age increase, P = 0.001) but not with deterioration in this test over time. 5STS deterioration was more pronounced in i.v. drug users (change in slope +0.62 s/year, P = 0.03). At any time point, 5STS performance was significantly worse in patients with time-updated history of cerebral CDC stage C conditions (+2.47 s, P < 0.001) and of diabetes (+0.95 s, P = 0.02). No significant associations were found for time-updated type of ART, viral load or CD4 count.
Discussion.– Compared to data in the literature, baseline 5STS time and 6MWD are poorer in adults with well-controlled HIV-infection, and performance in these tests deteriorates further over time. A multifactorial origin rather than virologic factors may contribute to this deterioration of the lower limb performance. Physical exercise training should be considered in these patients.
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Communications affichées
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Intérêt d’une rééducation passive pendant les 45 premiers jours après réparation de la coiffe des rotateurs
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Mots clés : Coiffe des rotateurs ; Rééducation ; Rééducation passive ; Immobilisation