Patients and methods.– Retrospective study led on 104 patients with chronic back pain having participated from 2008 till 2012. The main objective is the evaluation of the presence in work at 6 months and at 12 months.

Results.– The percentage of patients in service passed of 43.4% in the inclusion in 64.2% at 6 months, in 58.2% at 12 months (P < 0.0003). The intensity of the pain and the scores of the auto-questionnaires of Dallas, Quebec and FABQ decrease in a significant way at 6 months. We don’t find predictive factors on returning to the work. There are significantly more patients who practise a physical activity in 6 months and 12 months (35.2% in j0.684 in 6 months,54.4 in 1 year) and a regular auto-reeducation in 6 months of the program (56.8% against 1% initially). In 3 weeks and at 6 months, there is a significant decrease of the consumption of analgesic (more than half). At 6 months 55% of the educational objectives are reached and the satisfaction is close to 90%.

Conclusion.– This program of Functional Restoration and Education for low back pain had a positive effect on the resumption and the preservation of a professional and physical activity in 6 months and in 12 months.

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CO38-003-e

Comparison of three physical conditioning strategies for chronic low back pain: A randomized controlled trial

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Keywords: Chronic low back pain; Functional restoration program; Physical conditioning program
Objective.– Even though they widely demonstrated their effectiveness for chronic low back pain (CLBP), multidisciplinary functional restoration programs remain time-consuming, expensive and capacity limited. The objective of this study was to compare short-term outcomes of three physical conditioning programs: ambulatory individual physiotherapy (AIP), AIP mixed with multidisciplinary coordination, and multidisciplinary functional restoration program (FRP).

Methods.– Design: prospective 6-months randomized controlled trial.

Population.– Ninety-one CLBP workers (53 males, mean age 42.6 ± 8.8 years) with 225.7 ± 106.5 days mean duration of sick leave during the preceding 24 months.

Interventions.– For five weeks. (1) AIP: 15 one hour physiotherapy sessions, delivered in the community by private practice physiotherapists; mixed program: (2) AIP mixed with 5 one-day session, in a rehabilitation center providing coordination by a physiatrist, contact with the occupational physician, advice by an occupational therapist and a psychologist, group interaction; (3) FRP: 25 days of intensive and multidisciplinary spine-specific functional restoration program in a rehabilitation center.

Main outcome measures.– Sick leave duration during the next six months versus the preceding 6 months and quality of life (SF36), pain (AJS), psychological impact (Dallas, HAD, FABQ), at the end versus beginning of programs.

Results.– Twenty-one patients were randomized in AIP, 33 in mixed program and 37 in FRP. There was no initial between-group difference. Preliminary results show that all outcomes measures improved after treatment. Better results were observed in RFP and mixed program without between-programs significant difference. Sick leave duration decreased of 74.8, 74.9 and 70.3 days/6 months respectively in RFP, mixed program and AIP (P < 0.005). Quality of life and psychological impact improved significantly (P < 0.05) excepted for mental-SF36, anxiety/depression and social behavior-DPQ, HAD and FABQ in AIT. Pain improved significantly in all programs (respectively – 1.4, –1.4 and –1.2; P < 0.01).

Discussion.– Mixed program significantly improve social participation, quality of life and psychological impact of CLBP, as well as RFP. Developing this type of mixed programs could improve cost-effectiveness and allow the treatment of a greater number of CLBP patients with a given quantity of resources.

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Care related pain and functional restoration for chronic low back pain: A prospective study

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Keywords: Care related pain; Functional restoration; Chronic low back pain
Objective.– Care related pain is often unrecognized in our clinical practice. Care related pain can be defined as the increase or the induction of pain during a clinical investigation or during a treatment. Data about care related pain in the context of functional restoration for chronic low back pain are sparse. The aim of the study was therefore to assess care related pain during a program of functional restoration for chronic low back pain.

Material and methods.– Chronic low back pain patients were prospectively included in a 4-week program of functional restoration. The program was comprised of 7 hours of exercises each day: stretching, strengthening, aerobic activity, handling; five days per week. Low back pain was recorded before and after each morning and afternoon sessions, all over the program of functional restoration, for equivalence study. Equivalence was admitted if 95% confidence interval of the difference in pain intensity fell wholly in the interval ± 10/100 mm. Medication was recorded during the program. Progression of the patients during the program and 3-month effectiveness were also recorded for internal validity.

Results.– Thirty seven patients were included in the study: age 41 (SD 1.4) years, females 15, sick leave duration 13 (11) months. Low back pain intensity (0–100) 46 (19). They underwent a progression in load and spent energy during the program. Follow-up indicated improvement of functional ability and quality of life at 3 months. Main results indicated that there was no variation in pain intensity during the program of functional restoration. Indeed, all differences in pain intensity before and after each session remained in the equivalence interval ± 10 mm. Furthermore the variations in pain intensity were less than ± 5 mm and all 95% confidence intervals included the zero value. However medication intake increased during the program. There were more patients taking level II pain killers and antidepressants at the end of the program.

Conclusion.– There was no significant care related pain during our program of functional restoration for chronic low back pain. This may be due to adaptation of the medication and suggests the importance of close medical management of patients during functional restoration. These points should be underlined when proposing to patients functional restoration for chronic low back pain.

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Acceptance, stages of change of behavior and chronic back pain

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Objective.– The cognitivo-behavioral therapies demonstrated their profit in the care of the chronic back pain. Recent studies, demonstrate that the acceptance in the chronic pain is also an important factor. The objective is the improvement of the psychological flexibility of the painful patients. We estimated at the beginning and at the end of a program of functional restoration and education for chronic back pain, by a validated questionnaire the acceptance. Also, we estimated pain stages of change.

Methods.– Sixteen patients participating in this program between 2012 and 2013, in the Montpellier Hospital. The evaluation included the score of acceptance seven items, the PSOCQ, the HAD, the kinesiophobia was estimated
by the TAMPA scale, the evaluation of pain, the evaluation of the physical parameters.

Results.– On 16 patients, only 10 questionnaires were usable (questionnaires not filled, evaluation before, after not possible). At the end of 3 weeks, pain is very clearly improved with \( P = 0.013 \) the score of kinesiophobia also (31.8 vs 41.2) with \( P = 0.009 \).

The scores of acceptance are improved 27.44 against 21.88 at the exit but not significant with \( P = 0.14 \). The scores of change of behavior PSOCQ are all improved for all the patients for the hills preservation (will to improve its strategies to face) \( P = 0.0057 \) and no change for the intention. There was also a significant improvement of the anxiety (\( P = 0.03 \), not significant for the depression (\( P = 0.1 \)). The physical parameters (schober, outstrip fingers ground, poplité angles, outstrip heel spank, shirado, sorens) were improved.

Conclusion.– For all the patients, is turned out an increase of the implication of the patient in its care, at the end of the program. It also seems that this type of program brings an improvement of the acceptance of the pain chronic without it is significant on our small population as well as of the capacity to manage better their disease. Studies on a bigger population and a remote follow-up would be desirable.

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CO38-006-e Qualitative study of barriers to physical activity in population of low back pain patients

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Keywords: Chronic low back pain; Physical activity; Barriers; General practice; Qualitative study

Objectif.– To identify barriers to regular practice of physical activity in chronic low back pain patients.

Method.– This is a qualitative study based on semi-directive individual interviews. Patients have been suffering from low back pain for the last 12 months. They were recruited in Auvergne in primary care and in the Physical Medicine and Rehabilitation Department. Interviews were recorded and written.

Results.– Four obstacles to physical activity have been demonstrated: physical, psychological, socio-professional and environmental. Pain, fear of pain, fear of movement, and professional physical activity as an aggravating factor have been reported as main barriers. Patients stressed their lack of motivation, depression, anxiety and their fear of worsening their back pain by physical activity. They also reported that their behaviour and attitudes were influenced by the medical and non-medical information they had received. The results underline the importance of fears and beliefs in the representations of back pain patients concerning physical activity.

Conclusion.– A psycho-behavioural evaluation of chronic back pain patients is necessary in order to detect these potential obstacles. GPs are at the first place in therapeutic education, and may play a crucial role in the care of these patients.

Further reading

CO38-007-e Effects of chair type on lumbar curvature in patients with low back pain and healthy controls

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Keywords: Lumbar curvature; Sitting; Low back pain; Spinal disorders

Summary of background data.– The concept of ideal sitting posture is often used in practice, but lacks an evidence base.

Objectives.– To determine effects of chair and posture on lumbar curvature.

Study design.– Cross-sectional, comparative, matched study between healthy controls and chronic low-back pain (LBP) patients.

Methods.– Ten LBP patients and 10 matched controls were recruited. Two blinded experimented clinicians measured pelvic parameters on computed radiographs in two postures (upright vs. slumped sitting) on two chairs (usual chair vs. kneeling chair).

Results.– Reliability was excellent (> 0.9). As hypothesized expected sacral slope and lumbar lordosis changed less between standing and sitting on a kneeling chair than on a usual chair (\( P < 0.0001 \)) and less in patient than in controls (\( P = 0.046 \)) for lordosis only. In addition, changes were as expected more pronounced in slumped than upright sitting (\( P < 0.0001 \)). An interaction between chairs and postures for lumbar lordosis (\( P = 0.02 \)) indicated more pronounced effects of the chair in slumped sitting.

Conclusion.– Lumbar lordosis is reduced less when sitting on a kneeling chair compared to a usual chair. Although, healthy subjects showed more reduction of lordosis between standing and sitting, the chair effect was found both in non-specific low-back pain patients and healthy subjects.

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Communications affichées

Version française

P107-f École du dos et lombalgie chronique : à propos de notre expérience

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Mots clés : École du dos ; Lombalgie ; Devenir à distance

Durant la période allant du 01/09/10 au 01/09/11, 106 patients ont été inclus dans un programme multi-disciplinaire d’École-du-dos reposant sur une approche éducative, selon les critères de l’HAS, associant une initiatation à la prophylaxie rachiienne et l’apprentissage d’exercices musculaires spécifiques. Ce programme intensif, d’une trentaine heures environ, s’adresse aux lombalgiques chroniques de < 62 ans, qui, en dépit d’un retentissement fonctionnel significatif, sont pour la plupart en activité professionnelle lors de l’inclusion.

Méthode.– Les patients ont été interrogés, par questionnaire, à 18,6 mois ET = 3,9 de leur prise en charge.

Résultats.– Cinquante-neuf patients ont répondu au questionnaire soit 56,6 %. Deux patients ont été exclus car opérés entre temps, l’étude portant donc sur 57 patients. La moyenne d’âge est de 44,3 ans ET = 9,5. Le sex-ratio est de 1. Le diagnostic clinique, à l’inclusion, est : lombalgie dans 64 % des cas et lombo-radiculalgie dans 36 %.

Au décours immédiat du programme, les scores physiques musculaires (ITO, SORENSEN,...) et de souplesse se sont améliorés significativement. La