muscules) in SW, and greater improvement of SI (isometric contraction of abdominal muscles), QU and SD in FW.

Discussion - conclusion There was a significant improvement in 3 of 4 criteria in the 2 groups by the mini-FRP. Trends observed by comparing the 2 groups suggest proposing different FRP programs depending on physical constraints at work.

Keywords Low-back pain; Repetitive strain injury; Functional restoration programs (FRP); Sedentarily; Office workers;

Prevention

Disclosure of interest The authors have not supplied their declaration of competing interest.

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Correlation between VO2max and isokinetic parameters spine before and after functional restoration program in chronic low-back pain

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Objective Chronic low-back pain is accompanied by physical deconditioning which result among other by lower VO2max and by disturbances isokinetic explorations. The objective of this study was to investigate whether there was a correlation between VO2max and isokinetic parameters spine before and after a functional restoration program (FRP).

Material/patients and methods Uni-centric retrospective study in routine care. Isokinetic spine muscle strength evaluation and functional exercise exploration were performed before and after FRP for all hospitalized patients for 4 weeks to FRP.

Results One hundred and sixty-four patients were included: 65 women and 99 men, mean age: 42.3 years ± 7.8 years. It was observed that isokinetic muscle strength significantly increased including improved spine extensor and flexor muscles Peak Torque (PT) means evaluated in concentric contraction passing at angular velocities of 60° and 120°/sec (P = 0.0001). Meanwhile, the average VO2max improved (P = 0.0001). Before FRP, there was a statistically significant correlation between VO2max and spine muscle PT means: for extensors at 60°/s (r = 0.38, P = 0.0001) and at 120°/s (r = 0.34, P = 0.0001) and for flexors at 60°/s (r = 0.32, P = 0.0001) and at 120°/s (r = 0.28, P = 0.0003). These correlations have emerged higher after RFR: for extensors at 60°/s (r = 0.48, P = 0.0001) and at 120°/s (r = 0.37, P = 0.0001); for flexors at 60°/s (r = 0.33, P = 0.0008) and at 120°/s (r = 0.34, P = 0.0001).

Discussion - conclusion This work, which is the first to have explored these associations, can highlight a link between spine muscle group strength (PT) and aerobic abilities in chronic low-back pain patients. These links are strengthened after FRP reflecting improved efficiency of muscle recruitment. This study reinforces the interest of rehabilitation through combined exercises.

Keywords Isokinetics; VO2max; Chronic low-back pain; Rehabilitation effort

Disclosure of interest The authors have not supplied their declaration of competing interest.

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Posters

PO068

Assessment of knowledge on preventing acute and chronic low-back pain in the Marseille firefighting

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Objective Lumbago/low-back pain is the first cause of morbidity and incapacity work-related in the world. Its social and economical weight is considerable. In the armies, since 2009, lumbago is the object of a prevention plan. Therefore, we sought to determine knowledge levels of Marseille Marine fire fighters about primary and secondary prevention.

Material/patients and methods It’s a transverse, descriptive, observational study concerning a representative sample of French military population from Marseille Marine firefighter’s battalion, between September 25th 2014 and October 24th 2014. All the volunteers that answered the call, were included regardless of their gender, age, rank, length of service or job. The information gathering was carried out thanks to an anonymous questionnaire. Results were transcribed under the shape of a score, revealing knowledge level of pooled people about prevention.

Results Two hundred and thirty-six people were included. The point prevalence of lumbago is 20%. The median age of the occurrence of lumbago is 29.7 years. The median EVA (analog visual scale to estimate pain) is 3 over 10, the HAD or “Hospital Anxiety and Depression scale” is mainly non-symptomatic, QUEBEC score is 13.5, FABQ physical activity score is 15 and FABQ work score is 17. Primary prevention score is “good knowledge”. Secondary prevention score is “unsatisfactory knowledge”. Only a physician’s intervention can improve prevention scores.

Discussion - conclusion Even if Marine fire fighters constitute a population with physical risk factor is low, they have a high risk to develop lumbago. The main cause is certainly professional exposure. A good knowledge about primary prevention means doesn’t seem to decrease lumbago incidence. For the people that have already suffered of lumbago, knowledge of secondary prevention means stills unsatisfactory. A lot of people don’t use the prevention means. This is why it’s important to multiply means of information dissemination and insist on approved prevention means, but also on noxious effects of some therapeutics.

Keywords Lumbago; Prevention; Epidemiology; Fire fighters

Disclosure of interest The authors declare that they have no competing interest.

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