Primary goal was to determine how a regular physical activity could be efficient in non-specific chronic low back pain post-treatment. Secondary aim was to make a comparison between a collective and monitored treatment and an individual and self-controlled follow-up.

Methods

24 non-specific LBP patients, who have completed back school sessions, were randomized into 3 groups. A control group (CG, n=9), with no change in everyday activities. One collective treatment group (CTG, n=7) participating 2 sessions of 45 min/week including a walking session and an aqua-gym session. One individual treatment group (ITG, n=8) where patients had to achieve 10,000 steps/day in an autonomous way (controlled by pedometer). All tests were performed at the beginning of the study (T0) and after 6 weeks (T1) for the 3 groups.

Measured parameters at T0 & T1

<table>
<thead>
<tr>
<th>Used tests</th>
<th>TSK</th>
<th>Functional incapacity</th>
<th>Oswestry</th>
<th>Trunk flexors endurance</th>
<th>Ito-Shirado</th>
<th>Trunk extensors endurance</th>
<th>Sorensen</th>
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</thead>
<tbody>
<tr>
<td>Kinesiophobia</td>
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Results

- All groups were statistically identical at the beginning
- For all items, no statistically improvement was found for the control group (CG)
- For the ODI, the evolution for the CTG (p=0.0078) and the ITG (p=0.0156) were significant
- The results of the TSK were also enhanced with respectively p=0.0078 (CTG) and p=0.0039 (ITG)
- The Sorensen’s results have increased from 71±40 seconds to 103±27 seconds (p=0.0156) for the CTG and from 65±36 seconds to 102±37 seconds (p=0.0039) for the ITG. The results for the CG came down from 72±29 seconds to 65±26 seconds (p=0.4062)
- For the Ito-Shirado, only the CTG have shown a significant (p=0.0306) positive evolution
- CTG and ITG were statistically different from CG at T1

Conclusion

Considering the results, the benefits of a regular physical activity, in groups or individual, for patient suffering from non-specific chronic low back pain could be attested. CTG has a more significant evolution than ITG.