

Oral presentation

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## Is in-patient scoliosis rehabilitation clinically effective: a systematic PubMed review

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### Background

In-patient scoliosis rehabilitation has been assessed in a prospective controlled study.

This study is out-of-date as it was performed 1991, when the program lasted 6 weeks on average, and more recently the length of rehabilitation has been significantly reduced.

The results of postural changes during this shortened period of treatment are not significant, and the improvement of vital capacity is far from the values that were obtained in 1991. Meanwhile, there is evidence that improvement of health-related measures can be achieved on an out-patient program, and that these more modern programs have similar rates of surgery when compared to the in-patient approach described in the literature.

### Goal

The goal of this study was to find evidence for the application of in-patient rehabilitation programs. Types of studies included: clinical evaluation of in-patient rehabilitation (prospective controlled or randomized controlled trials). Meta analyses, due to their typical high standards, have also been included. To attempt to detect the true effects of the treatment, the control group inclusion criteria consisted of patient groups with observation as the only intervention.

Only studies better than level III have been taken into account, as these have been shown to be of high quality in health care research. The search strategy for identification of the studies was to use Pub Med and Medline, using key words such as: "in-patient rehabilitation", "prospective controlled study", "in-patient rehabilitation", and "randomized controlled study".

### Results

Two papers were found when searching for prospective controlled studies, none were found searching for a randomized, controlled trial. The two papers found were reviews citing the prospective controlled study on scoliosis rehabilitation mentioned above. Discussion: There is no evidence that in-patient scoliosis rehabilitation with reduced rehabilitation times (3-4 weeks) is superior to out-patient rehabilitation. Without a doubt, the psychological effects of in-patient rehabilitation may be an advantage over the outpatient approach, but there is no evidence that, with respect to health related issues, in-patient rehabilitation is superior to out-patient based concepts.

### Conclusion

There is no evidence for in-patient rehabilitation in terms of health related issues. To gain the psychological benefits, a two-week program can be considered as being sufficient. There are obvious cost effective advantages of an out-patient program compared to an in-patient program.