

## Update 51

### PHYSIOTHERAPY COMPARED WITH ADVICE TO STAY ACTIVE FOR LOW BACK PAIN.

Physiotherapists in the British NHS treat around 1.3 million people for low back pain each year, but there is only weak evidence for the effectiveness of routine physiotherapy and no evidence for the effectiveness of electrotherapy, laser treatment, ultrasound therapy, or traction.

The objective of this, multicentre, randomised controlled trial was to measure the effectiveness of routine physiotherapy compared with an assessment session and advice from a physiotherapist for patients with low back pain.

The authors recruited 286 patients with low back pain of more than six weeks' duration from the health service settings where they received the treatment.

Participants were randomised into one of two groups: A routine physiotherapy group and an advise to stay active group. The routine physiotherapy group's intervention was mostly made up of mobilisation and exercises. Both groups received an advice book.

The main outcomes were,

- Scores on the Oswestry disability index at 12 months,
- Scores on the Oswestry disability index (2 and 6 months),
- Scores on the Roland and Morris disability questionnaire,
- SF-36 (2, 6 and 12 months), and
- Patient perceived benefit from treatment (2, 6, and 12 months).

Two hundred of 286 patients (70%) provided follow up information at 12 months.

The patients were treated by 76 physiotherapists, reflecting the high turnover of staff in British NHS hospitals.

Treatment in the routine physiotherapy care group included,

- Joint mobilisation using low velocity thrusts (72%);
- Soft tissue techniques (14%);
- Specific exercises (e.g. McKenzie), abdominal stability or strengthening exercises, and mobility exercises for the lumbar spine (94%);
- Heat (6%);
- Cold treatment (3%).
- **The use of high velocity thrusts was rare (3%).**

Overall, 82% of patients in both groups complied with treatment.

Patients in the routine physiotherapy care group received a median number of five (range 1-12) sessions, with (82%) having six or fewer. The median number of sessions in the advice only group was one (range 1-22).

Patients in the routine physiotherapy group reported enhanced perceptions of benefit, but there was no evidence of a long term effect of physiotherapy in either disease specific or generic outcome measures.

The authors conclude,

"Routine physiotherapy seemed to be no more effective than one session of assessment and advice (to stay active) from a physiotherapist," and that, "Despite patient perceived benefits captured by a global indicator, the results suggest that the traditional model of physiotherapy should be challenged."

**ASRF Chiro. Update Editor's comments:** This study is described as a randomised controlled trial wherein physiotherapists gave participants in the control group advise to stay active while most those in the active care group received a combination of mobilisation and exercises.

There are a few important limitations to this study -

- Although the investigators were blinded to treatment allocation, it was not possible to mask the intervention from the patients or the physiotherapists beyond the baseline assessment for practical and ethical reasons.
- As the authors point out the internal validity of this study is limited because 30% of patients failed to provide data for the main outcomes at 12 months [Note, It has been advised for those critically appraising this type of study that if more than 20% of patients are lost at follow-up one should be particularly concerned about the validity of the conclusions (Shekelle PG, et al. Spine 1994;19:2028S-2031S)] .
- A further source of bias, which may have worked in favour of the routine physiotherapy group, was the difference in the median number of sessions received by participants in each of the groups - Patients in the routine physiotherapy care group received a median number of five (range 1-12) sessions. While the median number of sessions in the advice only group was one (range 1-22). Basically the participants in the routine physiotherapy group received a lot more care and attention than those in the advise group.

#### References:

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