

慢性頸部痛の患者 51 人を対象にした二重盲検試験

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Results.

Fifty two patients were included, at the initial examination one person had to be excluded because of severe pain, so fifty one patients were enrolled in the study. Five patients did not show at the follow-up appointment through noncompliance. Accordingly 51 patients (33 women and 18 men) were analyzed.

No significant difference was found between the groups concerning the baseline parameters listed in Table 1.

Patient-Rated Outcomes.

At baseline patients rated their pain on the Numeric Rating Scale with 4.136 in group TR and 3.391 in group SH. After one treatment pain was reduced in group TR to 1.477 versus 3.304 in group SH, showing statistical significance ($p < 0.01$). At follow up after one week the pain rating was almost equal (2.727/2.696).

Neck Performance Outcomes.

At baseline range of motion in the three planes was measured in degrees for flexion-extension 96.14 in group TR versus 105.22 in group SH, for sidebending 69.77 versus 70.65, for rotation 130.68 versus 125.0 and for total range of motion 293.59 versus 300.87. After one treatment motion in each plane increased. The measured values for flexion-extension were 96.14 versus 105.22 ($p < 0.1$), for sidebending 80.23 versus 67.83 (< 0.01), for rotation 141.14 versus 125.43

($p < 0.04$) and for total range of motion 334.09 versus 298.26 (< 0.03). So there was found a significant increase in sidebending and rotation as well as in total range of motion. At follow up after one week the following values were found: flexion-extension 110.0 in group TR versus 107.3 in group SH, for sidebending 71.14 versus 70.65, for rotation 135.68 versus 125.0 and for total range of motion 316.82 versus 303.0. These results still indicate a trend to improved motion in group TR but lacking of significance.

Side effects.

No notable increases in neck or headache pain were reported. Two patients described a mild headache between treatment and the 1 week follow-up.

Conclusion.

The treatment, using the Oscillating Percussion Technique is effective in order to improve ROM and to reduce pain as short term effects.

Further studies with a larger number of treatment sessions will have to prove long term effects.

結果

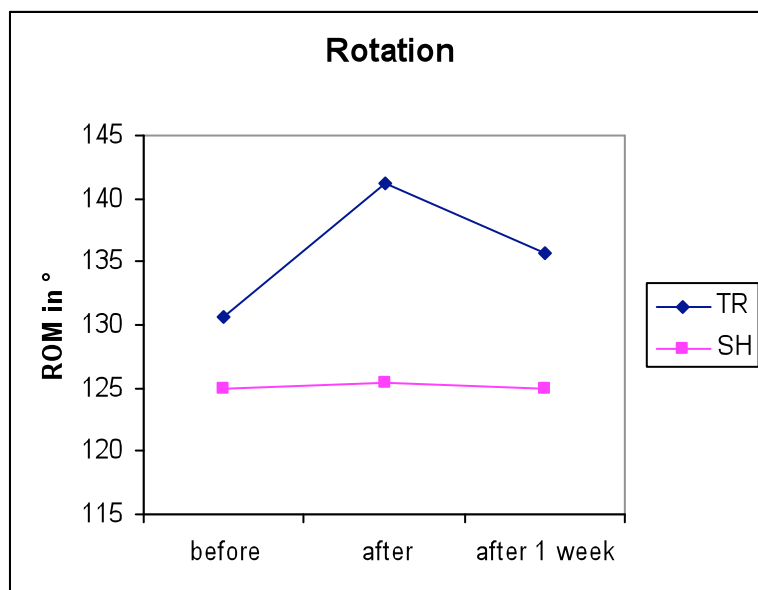


Figure 1. Rotation $p < 0,01$

回旋では、コントロール群に比べて治療群では可動域の改善を認め、1週間後も治療前よりも改善していた。

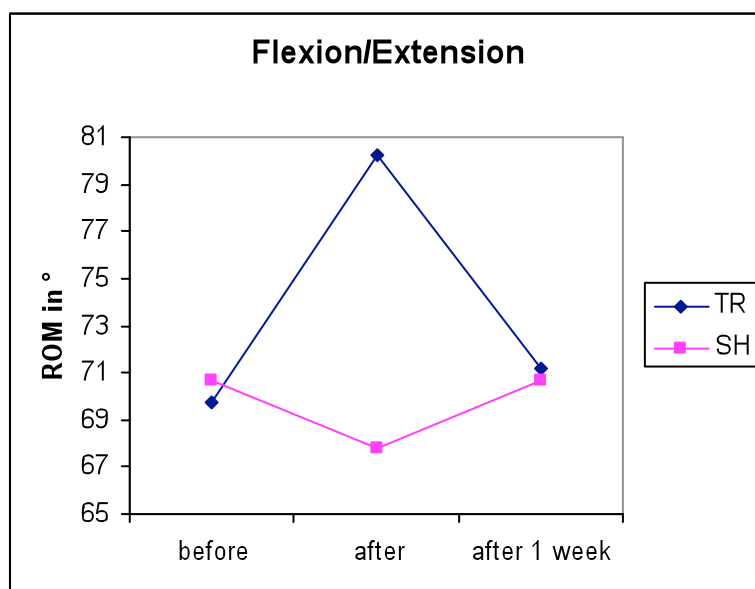


Figure 2. Flexion/Extension $p < 0,01$

伸展及び屈曲

治療により大幅な可動域の改善を認めたが、一週間後には治療前の同レベルになっている。

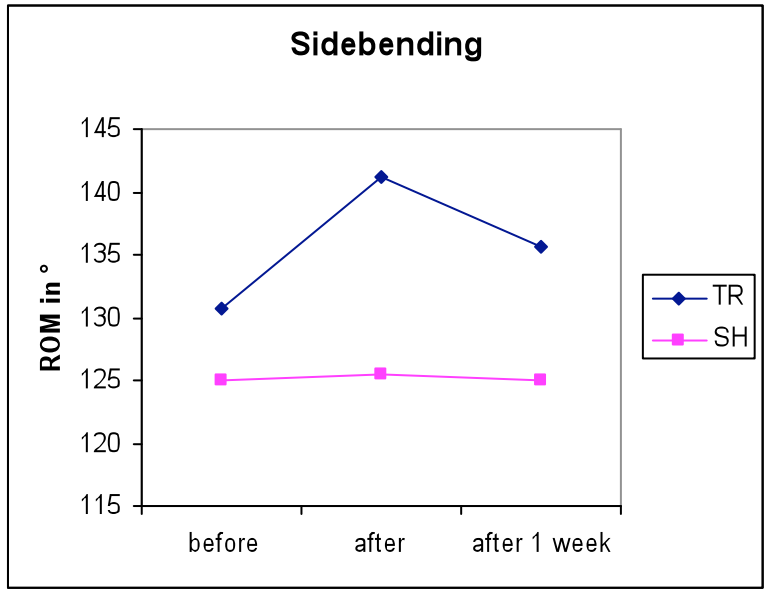
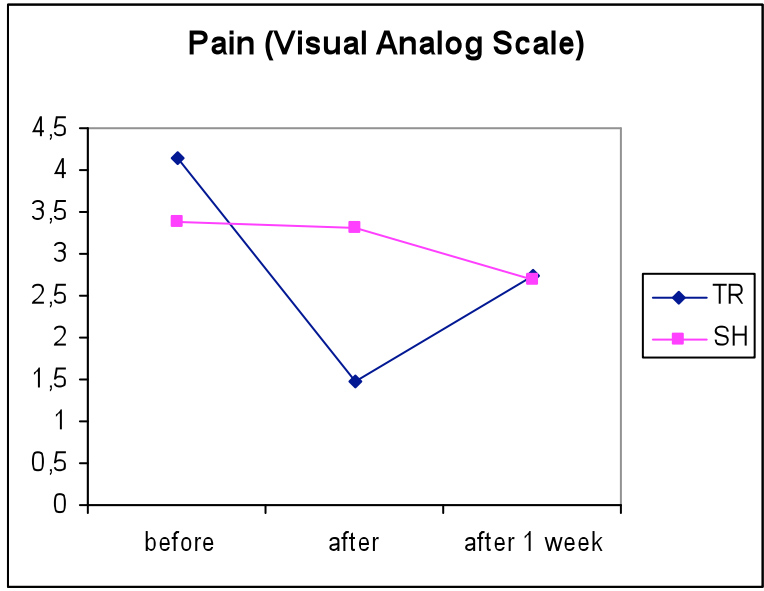


Figure 3. Sidebending p<0,01

側屈では、コントロール群に比べて治療群では可動域の大幅な改善を認め、1週間後も治療前よりも改善していた。



痛みは、コントロール群に比べて治療群では、治療により大幅な痛みの軽減を認めたが、一週間後には治療前よりは改善しているものの、コントロール群と同レベルの痛みを認めている。

副作用

明らかな副作用を認めなかった。

結果のまとめ

コントロール群と比べて、PANセラピーによる治療を行った群では、大幅に頸部痛が軽減し関節の可動域が改善した。一週間後では、わずかながら症状の改善が維持されていた。

結論

共鳴振動を用いたPANセラピーにより、慢性頸部痛に対して短期間に関節の可動性を改善し、痛みを軽減することが可能であった。