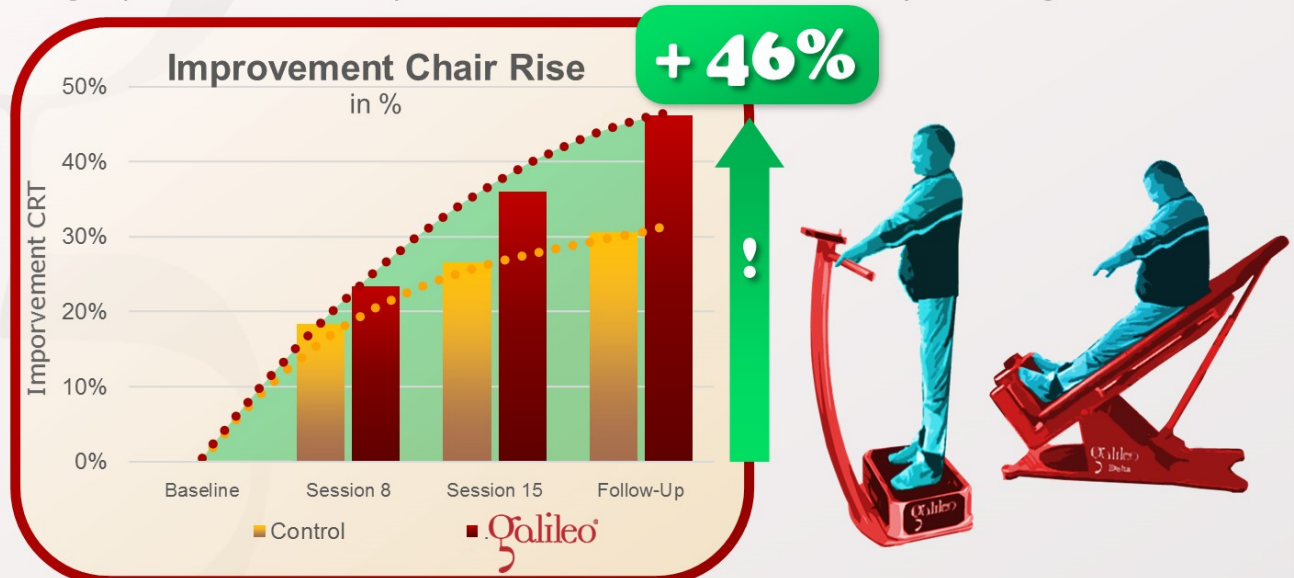




Can Galileo Training improve muscle function in patients with chemotherapy-related Neuropathy ?

The answer is: YES

This study shows the effect of Galileo Training on pain and muscle function in patients with Neuropathy due to chemotherapy (15 weeks, 1/week, 3x3min., 10-13 warm-up lying, 19-23Hz standing, 9-30Hz cool-down at 30° tilt). Both groups received 60 min. massage and mobilization plus 15 minutes functional training. The Galileo group showed increased improvements in muscle function measured by chair rising time.



Schonsteiner SS, Erhardt E, Kunecki J, Eisenschink AM, Rawer R, Dohner H, Kirchner E, Schlenk RF, et al.: A randomized exploratory phase 2 study in patients with chemotherapy-related peripheral neuropathy evaluating whole-body vibration training as adjunct to an integrated program including massage, passive mobilization and physical exercises.; Exp Hematol Oncol, 6(1):5, 2017; PMID: 28194306; GID: 4363

Galileo Research Fact Sheet #36

Therapy: Neuropathy / Chemotherapy

www.galileo-training.com

This study used Galileo Training in patients who received chemo-therapy to treat cancer. Typically, these patients develop a so-called Neuropathy (chronic pain) as a side effect of the chemo-therapy.

In this study Galileo Training was used primarily to reduce this pain but also in this publication the side-effects on muscle function are reported.

On first sight these effects might seem small but having a look at the training protocol used in this study reveals that Galileo Training was very effective:

Both groups received over 15 weeks once a week 60 minutes of massage and mobilization and 15 minutes of functional training. In addition, the Galileo group received 9 minutes of Galileo Training of which only 3 minutes targeted muscle function and power.

In addition, these 3 minutes only used a moderate stimulus of 19-23Hz (not very intensive training) – yet the Galileo group showed significantly higher effects in chair-rising test than the control group (The CRT targets muscle power since chair-rise is a fast movement in a short time).

This is one of many example showing how effective Galileo Training can be.



[Exp Hematol Oncol.](#) 2017 Feb 7;6:5. doi: 10.1186/s40164-017-0065-6. eCollection 2017.

A randomized exploratory phase 2 study in patients with chemotherapy-related peripheral neuropathy evaluating whole-body vibration training as adjunct to an integrated program including massage, passive mobilization and physical exercises.

Schönsteiner SS¹, Bauder Mißbach H², Benner A³, et al

Abstract

BACKGROUND:

Chemotherapy-induced polyneuropathy (CIPN) is a common toxicity after chemotherapy, immunomodulatory drugs or proteasome inhibitors, which is difficult to treat and may also have impact on quality of life. The objective of the study was to evaluate whole-body vibration (WBV) on the background of an integrated program (IP) including massage, passive mobilization and physical exercises on CIPN.

PATIENTS AND METHODS:

In an exploratory phase-2 study patients with CIPN (NCI CTC grade 2/3) were randomized for WBV plus IP (experimental) to IP alone (standard). 15 training sessions within 15 weeks were intended. As primary endpoint we used chair-rising test (CRT) to assess physical fitness and coordination. In addition, locomotor and neurological tests and self-assessment tools were performed.

RESULTS:

A total 131 patients with CIPN were randomized (standard, n = 65; experimental, n = 66). The median age was 60 (range 24-71) years; 44 patients had haematological neoplasms and 87 solid tumors. At baseline, all patients presented with an abnormal CRT. Fifteen (standard) and 22 (experimental) patients left the program due to progression/relapse or concomitant disease. There was no significant difference in the proportion of patients with normal CRT (<10 s) at follow up between experimental (68%) and standard (56%) (p = 0.20). All patients experienced less symptoms and pain (p < 0.001) and had improved CRT (p < 0.001) over time. WBV was significantly associated with a higher reduction of time needed for CRT (p = 0.02) and significantly improved warm-detection-threshold comparing baseline to follow-up assessment (p = 0.02).

CONCLUSION:

Whole-body vibration on the background of an IP may improve physical fitness and coordination in patients suffering from CIPN. Trial

PMID: 28194306 DOI: [10.1186/s40164-017-0065-6](#)