# Studien Yoga bei Gehirninfarkten

Phys Ther 2004 Jan; 84(1):33-48, Bastille JV; Gill-Body KM

## A yoga-based exercise program for people with chronic poststroke hemiparesis.

Many people who have had astrake report an impaired health status because of a reduced level of activity. Praponents of yoga contend that it offers agentie alternative exercise pragram that can be easily adapted for people who have had astrake. Four subjects with chronic poststroke hemiparesis participated in this single-case study. The primary outcome measures were the Berg Balance Scale (BBS) and the Timed Movement BaUery (TMB). A secondary outcome measure was the Strake Impact Scale (SIS). The baseline testing phase varied for each subject and ranged fram 4 to 7 weeks. The 8-week intervention phase consisted of 1.5-hour yoga sessions, 2 times per week, in the subjects home. The primary outcome data were collected each week, and the secondary outcome data were collected before the baseline testing phase and before and after the intervention phase. Subjects 1, 2, and 4 had improved TMB scores, and subjects 3 and 4 had improved BBS scores. The results suggest that yoga may be beneficial to people who have had astrake. Further investigation is warranted to further examine the effects of yoga in this population.

Top Stroke Rehabil. 2007 Jul-Aug;14(4):1-8. Lynton H, Kligler B, Shiflett S.

#### Yoga in stroke rehabilitation: a systematie review and results of a pilot study.

This article presents a systematic review of the literature pertaining to the use of yoga in stroke rehabilitation . In addition, we present the results of a small pilot study designed to explore the hypothesis that a Kundalini yoga practice of 12 weeks would lead to an improvement in aphasia as weil as in fine motor coordination in stroke patients. The 3 participants attended yoga classes twice a week for 12 weeks, before and after which they were tested on the O/Connor Tweezer Dexterity test, a timed test where the participant places pins in a Peg-Board with tweezers, and the Boston Aphasia Exam for speech. All 3 participants showed improvement on both measures. The small sample size makes it impossible to draw definite conclusions, but the positive trends in this study suggest that further research should be done to examine the effects of Kundalini yoga on specific illnesses or medical conditions

Altern Ther Health Med. 2012 May-Jun;18(3):34-43. Chan W, Immink MA, Hillier S.

# Yoga and exercise for symptoms of depression and anxiety in people with poststroke disability: a randomized, controlled pilot trial.

The study investigated whether supplementing exercise with participation in a yoga program would provide further improvements in self-reported symptoms of depression and anxiety in a chronic poststroke population, and it also assessed trial feasibility for future studies. The research team designed a randomized, controlled pilot trial that included an exercise-only group (EX, control) and a yoga-and-exercise group (YEX, intervention). The participants included 14 individuals with chronic poststroke hemiparesis: eight in the intervention group and six in the control group. The YEX group participated in a 6-week standardized program that included yoga in weekly group sessions and home practice in addition to exercise in a weekly group class. The EX group participated only in the group exercise class weekly for 6 weeks. The research team assessed self-reported symptoms of depression using the Geriatrie Depression Scale (GDS15) and symptoms of anxiety and negative affect using the State Trait Anxiety Inventory (STAI). Comparison of individuals ease results indicated elinieally relevant improvements in both groups, although members of the intervention group had greater improvements. Participants reported no adverse events, and the study experienced high retention of participants and high compliance in the yoga program. This pilot study provides preliminary data on the effects of yoga combined with exercise to influence mood poststroke. It is a feasible, safe, and acceptable intervention, and the field requires additional investigations with a larger sample size.

Strake. 2012 Sep;43(9):2402-7. Epub 2012 Jul 26. Schmid AA, Van Puymbraeck M, Altenburger PA, Schalk NL,. Dierks TA, Miller KK, Damush TM, Bravata DM, Williams LS.

### Poststroke balance improves with yoga: a pilot study.

This was a prospective, randomized, pilot study of yoga-based rehabilitation for people with chronic stroke. All yoga sessions were taught by a registered yoga therapist, occurred twice per week for 8 weeks and included seated, standing, and floor postures with relaxation and meditation. Balance was assessed with the Berg Balance Scale, balance self-efficacy with the Activities-specific Balance Confidence Scale, FoF with a dichotomous yes/ no question, and quality of life with the Strake Specific Quality of Life scale.

RESULTS: There were no significant differences between wait-list control (n=10) and yoga (n=37) graups in baseline or follow-up scores. However, using within-grol!P comparisons, yoga group data demonstrated significant impravement in balance (Berg Balance Scale,  $41.3\pm11.7$  vs  $46.3\pm9.1$ ; P<0.001) and FoF (51% vs 46% with FoF; P<0.001). A group yoga-based rehabilitation intervention for people with chronic stroke has potential in improving multiple poststroke variables. Group yoga may be complementary to rehabilitation, may be possible in medicalbased and community-based settings, and may be cost-effective. Further testing of graup yoga-based rehabilitation interventions is warranted.