



Neue nicht-medikamentöse Behandlungsformen

Florian Hatz

Nicht-medikamentöse Behandlungsformen

- Physiotherapie
 - Erhalt der Selbstständigkeit, Gehfähigkeit
 - Muskeltraining
- Logopädie
 - Sprechtraining -> Sprachtrainingsstudie Unispital Basel
 - Schluckabklärung / -therapie
- Ergotherapie
 - Handwerkliche Fähigkeiten insbesondere zur Verrichtung von Alltagsaktivitäten, wie körperliche Pflege, Ankleiden oder Haushaltsführung
 - Der Einsatz von speziellen Hilfsmitteln

_Sport / Bewegungstherapie_____

- Patienten mit Morbus Parkinson sind 30% weniger aktiv als eine gesunde Vergleichsgruppe (van Nimwegen et al., 2011)
- Tanzen
 - Tango (Hackney et al., 2007; Hackney and Earhart, 2009; Duncan and Earhart, 2012)
 - Klassische Tänze (Heiberger et al., 2013)
 - Irish Dance (Volpe et al., 2013; Shanahan et al., 2015)
 - Salsa
- Nordic-Walking
- Tai-Chi
- Klettern
 - Fallberichte
 - Info: http://www.parkinson.ch/index.php?id=256



Tanzen

Meiste Studien zu Tango

Hackney et al., 2007; Hackney and Earhart, 2009, 2010; Duncan and Earhart, 2012; Foster et al., 2013; McKee and Hackney, 2013; Duncan and Earhart, 2014

Verbesserung des Gleichgewichts
 Earhart, 2009; deDreu et al., 2012, 2014; Sharp and Hewitt, 2014; Shanahan et al., 2015

Salsa und Tango: Tanzen ohne vordefinierte Routinen



Tanzen

Are the Effects of Community-Based Dance on Parkinson Disease Severity, Balance, and Functional Mobility Reduced with Time? A 2-Year Prospective Pilot Study

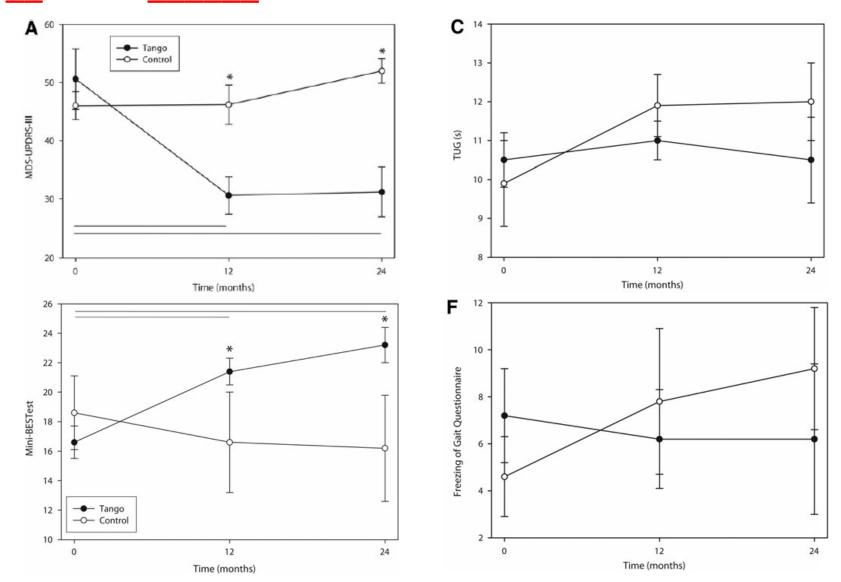
Ryan P. Duncan, PT, DPT, and Gammon M. Earhart, PhD, PT1-3

10 Patienten, 5 Patienten in der Tango- und 5 Patienten in der Kontrollgruppe

Tango: 2x wöchentlich 1 Stunde, Studiendauer: 2 Jahr

Outcome: MDS-UPDRS III, Mini-Balance Evaluation Systems Test, Geschwindigkeit beim Gehen, Zeit für Aufstehen/Losgehen, 6-Minuten-Gehtest, Freezing-Fragebogen

Tanzen____



Kontakt: Tango Schule Basel, Cecile Siedler, Tel: +41 79 472 28 91



Nordic-Walking____

Effects of a Flexibility and Relaxation Programme, Walking, and Nordic Walking on Parkinson's Disease

I. Reuter,^{1,2} S. Mehnert,¹ P. Leone,² M. Kaps,¹ M. Oechsner,³ and M. Engelhardt⁴

- 90 Patienten mit Morbus Parkinson
- Randomisierung zu drei versch. Behandlungsruppen:
 - Nordic Walking, 3x pro Woche 70 Minuten für 6 Monate
 - Gehtraining, 3x pro Woche 70 Minuten für 6 Monate
 - Dehnungs- und Relaxationsübungen

¹Department of Neurology, Justus Liebig University, Am Steg 14, 35392 Giessen, Germany

² Soemmerring Institute, Bad Nauheim, Germany

³ Parkinsonklinik Bad Nauheim, Germany

⁴Department of Orthopedics and Trauma surgery, Klinikum Osnabrück, 49076 Osnabrück, Germany

Nordic Walking

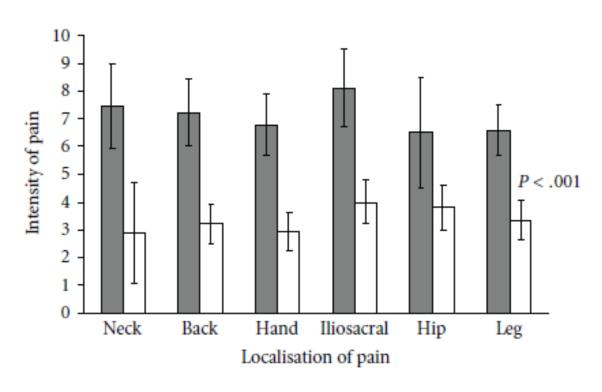
Table 4: Comparison of improvement in leg agility, alternating hand movements, posture, postural stability, freezing, and gait pattern between the training groups.

Parameters	Flexibility and relaxation group $N = 30$		Walking group $N = 30$) Nor	Nordic walking group $N = 30$		
	no	yes 1 pt	yes 2 pts	no	yes 1 pt	t yes 2	pts no	yes 1 pt	yes 2 p
					Percen	tage (%)			
Leg agility left	60	30	10	23.3	36.7	40	20	30	50
			40			76.7			80(%)
Leg agility right	56	40	3	23.3	40	36.	7 16.7	40	43 3
0070			43			76.7			83.3(%)
Alternating movements right	53.3	33	13	30	43.3	26.	7 23.3	30	46 7
hand			46			70			76.7(%)
Alternating movements left	60	20	20	30	40	3)	26.7	33	40
hand			40			70			73(%)
Posture	43.3	23.3	33	36.7	36.7	26.	7 20	40	40
			56.3			63.7			80(%)
Freezing	53.3	36.7	10	23.3	40	36.	7 20	40	40
			46.7			76.7			80(%)
Postural stability	46.7	43.3	10	36.7	26.7	36.	7 16.7	40	43 3
			53.3			63.7			83.7(%)
Gait pattern	50	43.3	6.7	40	23.3	36.	7 13.3	33	53 3
			50			60			86.3

The first column indicates the percentage of patients who did not improve, the next column the percentage of patients who improved by 1 point, and the second column indicates the percentage of patients who improved by 2 points. The Bold value presents the percentage of all patients of a group who improved regardless of the amount of improvement.

Nordic Walking____





- NW T0
- □ NW T1

Nordic Walking____



Keine dediziertes Angebot für Patienten mit M. Parkinson, aber Möglichkeit bei einer Gruppe für Patienten mit Diabetes teilzunehmen

Kurse jeweils am Donnerstag um 9.00h in Bottmingen

Kontakt: Eugenie Aebi, Tel 078 845 13 93



Tai-Chi

The NEW ENGLAND JOURNAL of MEDICINE

Tai Chi and Postural Stability in Patients with Parkinson's Disease

Fuzhong Li, Ph.D., Peter Harmer, Ph.D., M.P.H., Kathleen Fitzgerald, M.D., Elizabeth Eckstrom, M.D., M.P.H., Ronald Stock, M.D., Johnny Galver, P.T., Gianni Maddalozzo, Ph.D., and Sara S. Batya, M.D.

195 Patienten mit Morbus Parkinson

Randomisierung zu 3 Gruppen:

- Tai-Chi, 2x pro Woche 60 Minuten für 24 Wochen
- Krafttraining
- Dehnungsübungen



Tai-Chi____

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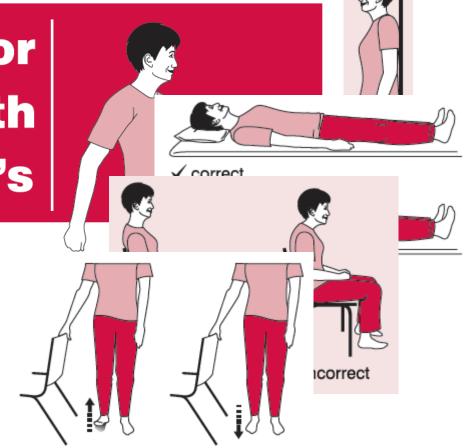
Measure	Tai Chi (N = 65)	Resistance (N = 65)	Stretching (N=65)	Between-Group Difference in Mean Change from Baseline†			
				Tai Chi vs. Resistance (95% CI)	P Value	Tai Chi vs. Stretching (95% CI)	PValue
Timed up and go (sec)‡‡							
Baseline	8.60±2.90	8.95±2.72	8.69±3.18				
6 mo	7.55±2.69	7.95±2.60	8.67±3.45	-0.05 (-0.55 to 0.46)	NS	-1.03 (-1.58 to -0.47)	< 0.001
UPDRS III score∭							
Baseline	15.28±5.59	15.32±6.04	15.06±6.17				
6 mo	8.86±4.12	10.25±4.83	13.66±7.54	-1.34 (-3.28 to 0.59)	NS	-5.02 (-6.90 to -3.13)	<0.001

Bewegungsübungen____



Exercises for People with Parkinson's

Having Parkinson's does not mean you should sit down and stop being active. Actually the opposite is true. Exercise, which includes being active, stretching, practicing good posture and doing specific exercises, should be a key component of your daily life.



http://www.parkinson.ca/activity

Wii - Fit





 Mehrere Studien mit jeweils relativ geringen Patientenzahlen belegen die Wirksamkeit ₹**2 2 0 0'11"95**

(Zettergren et al., 2011; Mhatre et al., 2013; Goncalves et al. 2014)

Table 2. Descriptive statistics of the UPDRS motor sub-scale, Schwab & England and MIF, before and after virtual training.

Assessments	Virtual program	Mean	Standard Deviation	Student's t-test
Motor sub-scale	Pre-treatment	28.5	9.9057	Sig.P =0.0000008522
	Post-treatment	15.8	7.4948	< 0.05
Schwab & England		79.3	9.611	Sig.P=0.00004072
	Post-treatment	90.0	6.546	< 0.05
MIF	Pre-treatment	114.3	6.07	Sig.P =0.00008442
	Post-treatment	121.3	2.65	< 0.05

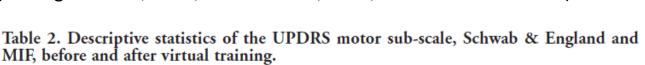
Wii - Fit





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_Hilfsmittel - Ergotherapie_____



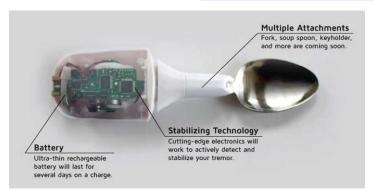






Tremor - Hilfsmittel

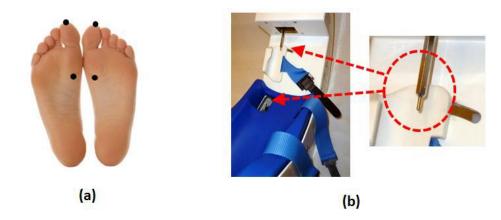
«Tremorlöffel» - <u>www.amazon.de</u> (Liftware oder Gyenno)





Automatisierte Mechanische Periphere Stimulation

Gondola





2 min Behandlungsdauer

- Reduzierung von Gangblockaden,
 Gangverzögerungen und motorischen
 Blockaden
- Verringerung von Bewegungsverlangsamung (Bradykinesie)
- Verbesserung des Gleichgewichts und damit Verringerung der Sturzgefahr

Automatisierte Mechanische Periphere Stimulation

Long-term effects of automated mechanical peripheral stimulation on gait patterns of patients with Parkinson's disease

Fabrizio Stocchi^a, Patrizio Sale^a, Ana F.R. Kleiner^{b,c}, Miriam Casali^a, Veronica Cimolin^d, Francesca de Pandis^c, Giorgio Albertini^a and Manuela Galli^{a,b}

18 Patienten mit Morbus Parkinson, 15 gesunde Kontrollen

2 Therapiesitzungen (2 Minuten) pro Woche während 3 Wochen

Untersuchungen: Direkt vor und nach Behandlung, 10 Tage nach Behandlungen

Intervention	UPDRS III	PDQ39	TUG
Pre	27.44 ± 6.42	51.87±31.320	16.12 ± 5.51
Post 6 AMPS	19.22±3.66*	39.5 ± 23.25*	12.75 ± 1.75*
Post 10 days	23.66±4.03**	42.12±22.29**	14.37 ± 2.13**



Ernährung____

Kaffee

Kaffee-Konsum reduziert das Risiko an Parkinson zu erkranken (Heman et al., 2002) Als A2A-Antagonist können OFF-Zeit als auch Dyskinesien vermindert werden (Nicoletti et al., 2015)

Proteinarme Diät

L-Dopa besitzt große Ähnlichkeit zu Eiweißbausteinen, daher kompetitiver Transport ins Blut/Gehirn (Nur wenige Patienten betroffen)

Verringerte Darmbewegung

Ballaststoffreiche Ernährung, ausreichende Trinkmenge (>1.5 Liter pro Tag) Mehrere kleine Mahlzeiten pro Tag

Ernährung

/ Zenith Nutrition / Zenith Nut

Zenith Nutrition Mucuna Pruriens Plus 20mg Capsules



Promotes and enhances brain functions

Zenith Nutrition Mucuna Pruriens Plus 200mg Capsules

- Zenith Nutrition Mucuna Pruriens Plus 200mg u sules can be shipped to Switzerland [CH] 8 Work wide.
- Zenith Nacition Mucuna Pruriens Plus 20 mg
 Capsules Express Shipping Transit 70 me of is 7 to 10 working days from the shipping days.
- Zenith Nutrition Muo a Process Plus 200mg
 Capsules Product Usually ups within 2 to 3 working days from India.
- Free Express shift ring for orders to be of CHF 75 & above.



on Mucuna Pruriens Plus 200mg Capsules

Zenith Nutrition Mucuna Pruriens Plus 200mg Capsular - Product Information

Zenith Nutrition Mucuna Pruriens Plus 200mg Capsules Product Decription :

Zenith Nutrition Mucuna Pruriens Plus capsules control the extracts of the Mucuna pruriens herb that has been used as a medicinal plant in India for a very long time. It acts as an aphrodisiac, which helps in reducing the problems we infertility and increases sexual desire.

In addition, these capsules help in enhancing mental alertness, and maintaining cognitive and neural functions. These capsules reduces a chances of brain degradation. They uplift your mood as well. Zenith Nutrition accura Pruriens Plus capsules also help in improving the intestinal health. So get a pack of these capsules to avail their numerous benefits



__Ich danke für die Aufmerksamkeit_____