



Physical Fitness Training in Subacute Stroke

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Hintergrund

Patienten sind dekonditioniert

- Geringe Fitness

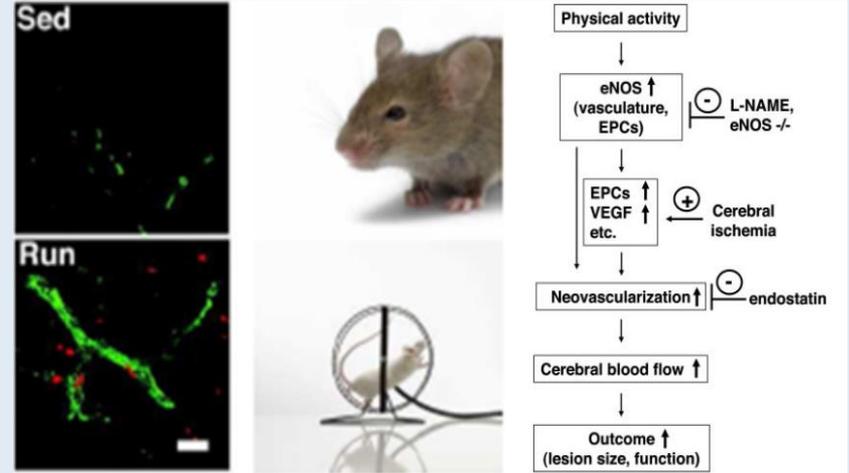
Mögliche Ursachen

- Inaktivität

Mögliche Folgen

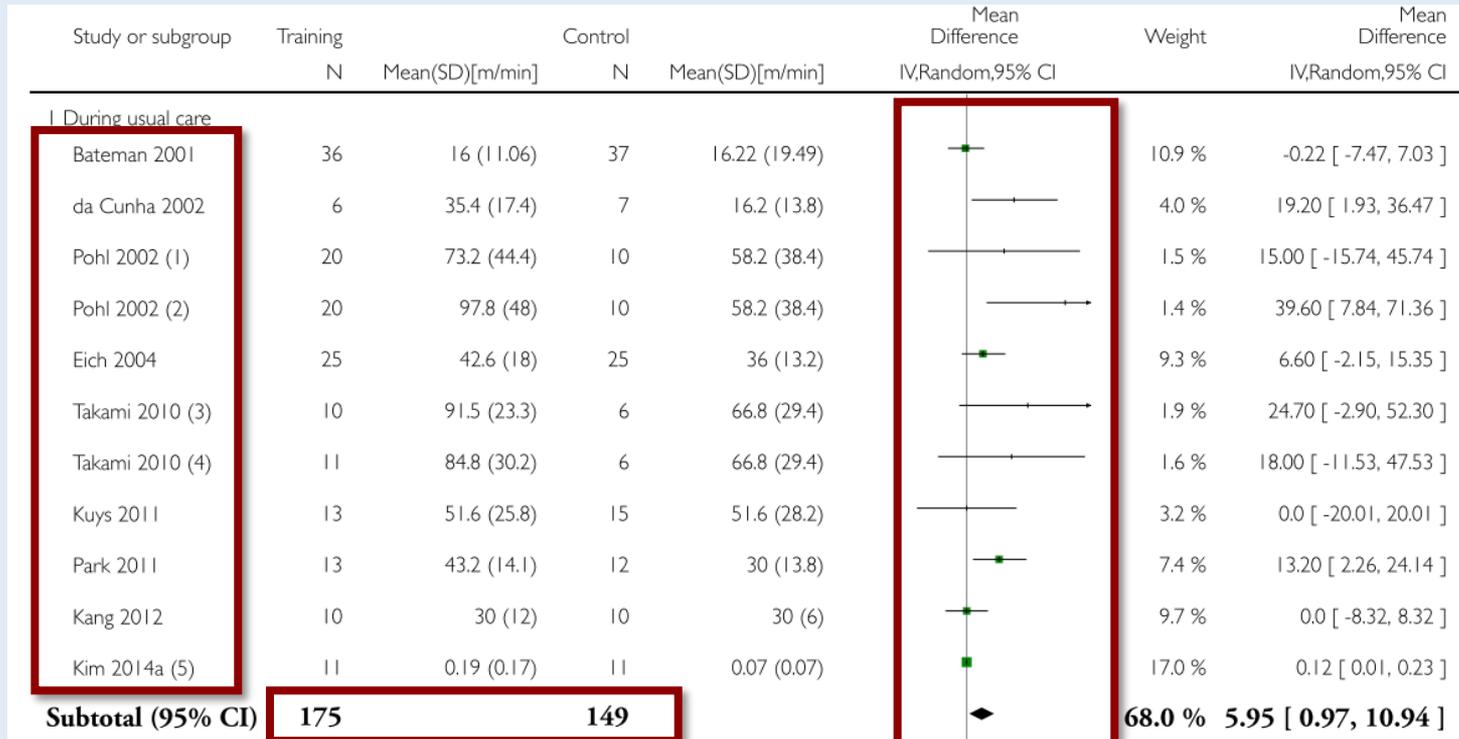
- Weiterer Schlaganfall
- Verlust der Rehabilitationsfortschritte

Neuroplastizität



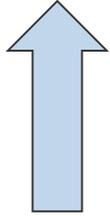
Gertz *et al.* Circ Res 2006

Anstieg der Ganggeschwindigkeit nach aeroben Training

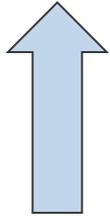


Saunders *et al.* Cochrane 2016

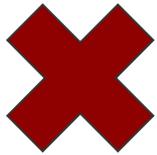
Aerobes Ausdauertraining führt zu:



Ganggeschwindigkeit



Barthel-Index

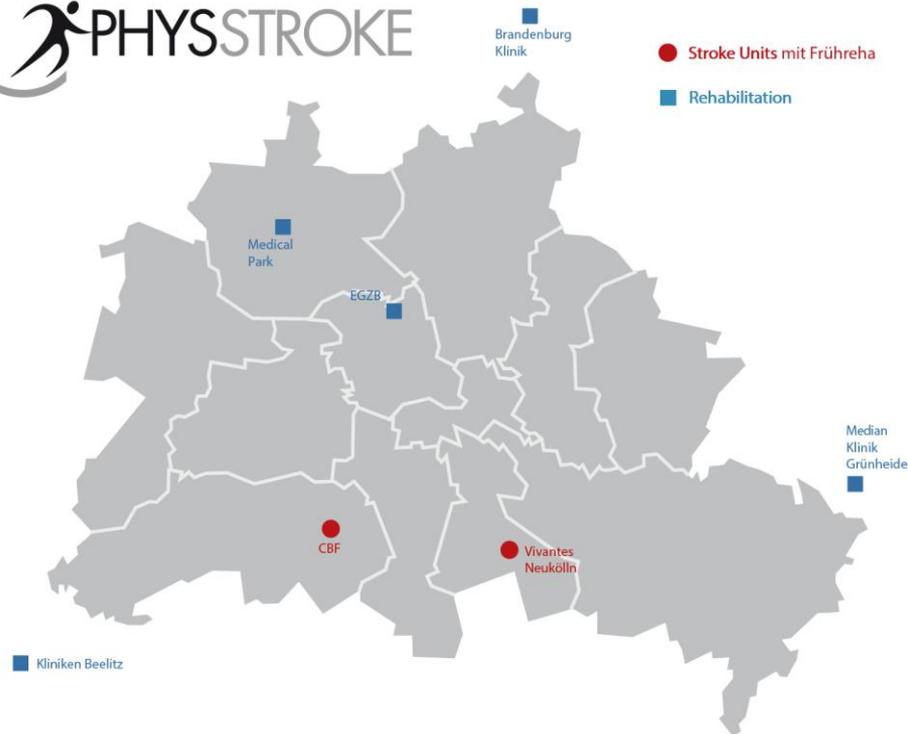


Re-Infarkt, kardialen Infarkt,
Überweisung ins Akuthaus oder Tod

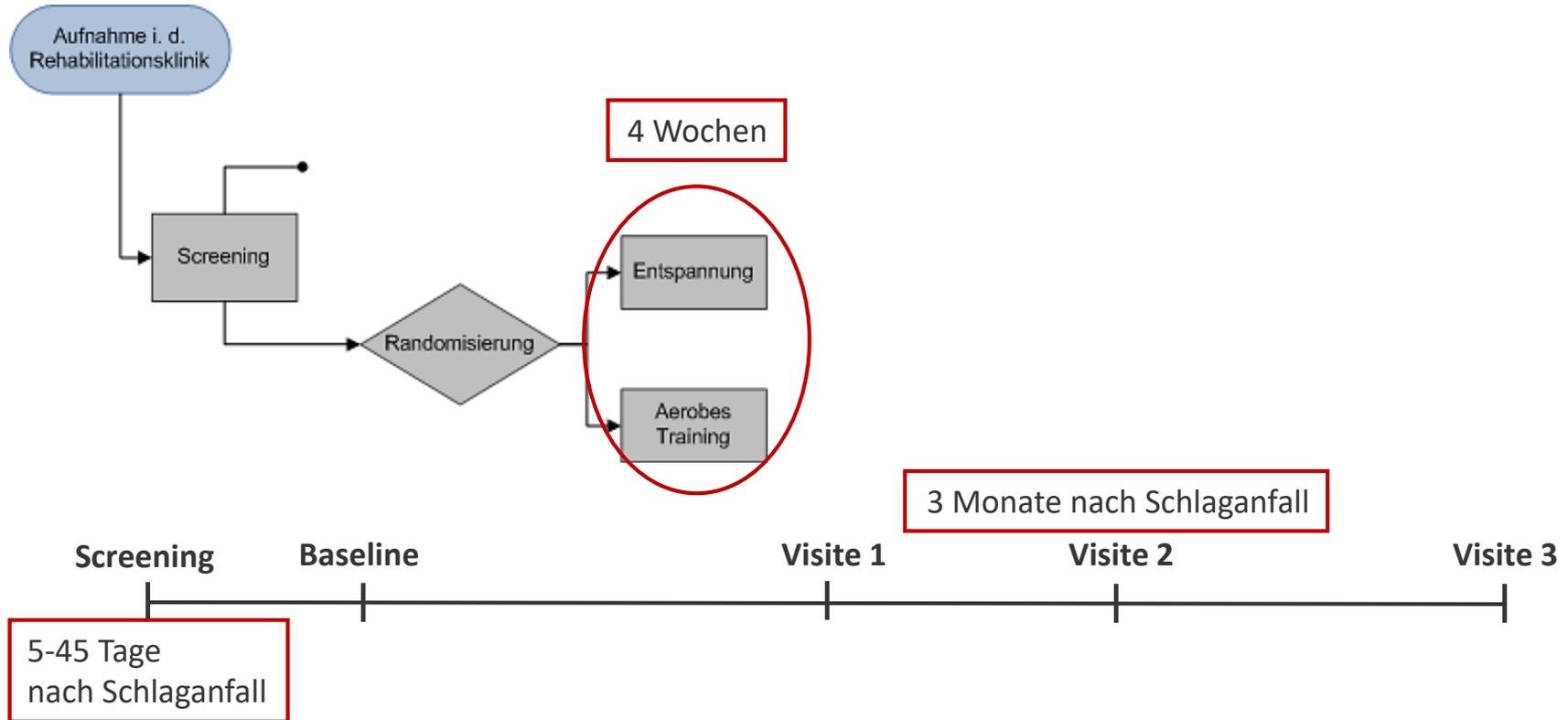


3 Monate
nach Ereignis

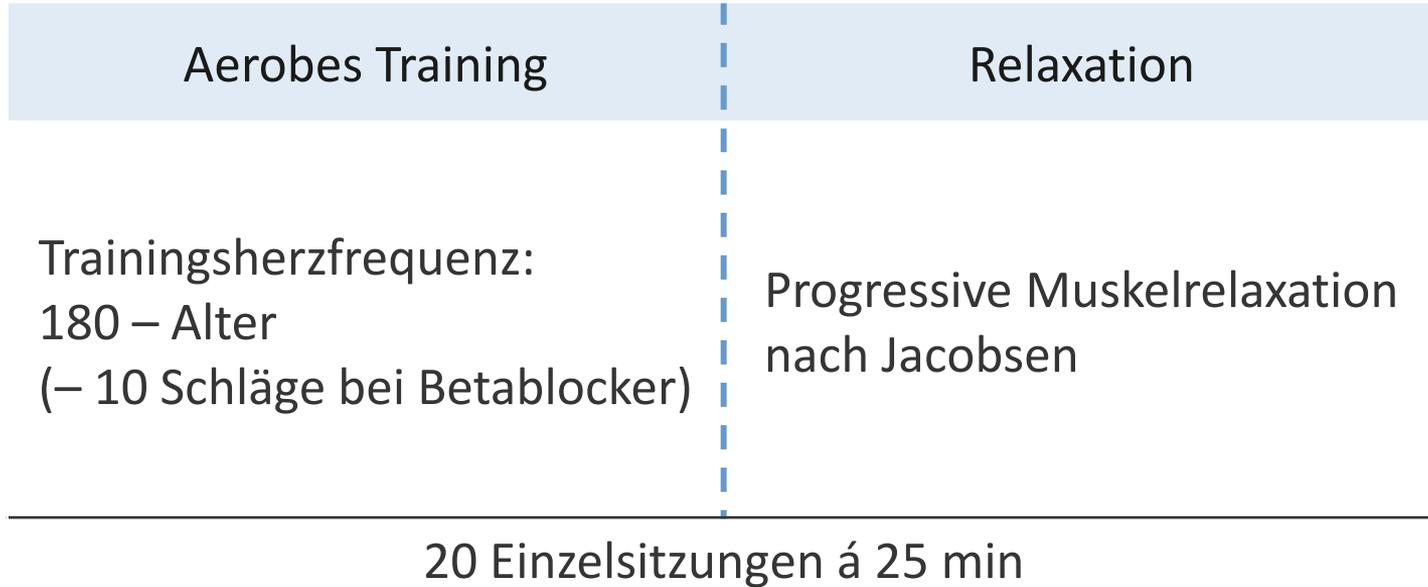
Multizentrische, verblindete, randomisierte, klinische Studie



200 Patienten mit Barthel-Index ≤ 65



Intervention



Aerobes Training



FAC 0 - 2



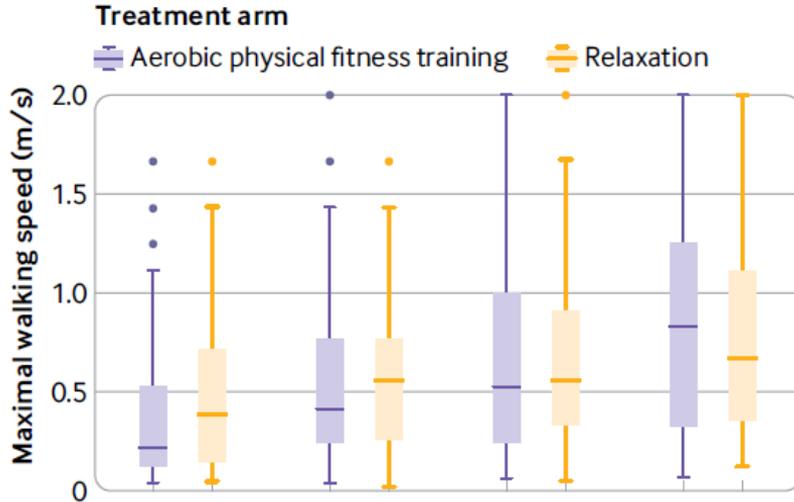
FAC 3 - 5

Relaxation



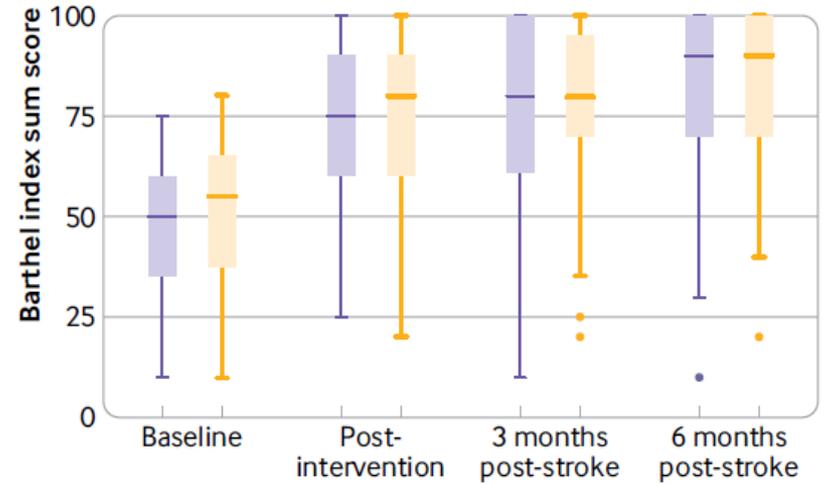
Primäre Endpunkte

Ganggeschwindigkeit



0,1 m/s (0,0 bis 0,2; $p = 0,23$)

Barthel-Index



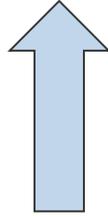
0 Punkte (-5 bis 5; $p = 0,99$)

Sicherheitsendpunkte

Table 4 | Safety outcomes by aerobic physical fitness training or relaxation session (control group)

Events	Aerobic physical fitness training (n=105)	Relaxation sessions (n=95)	Total cohort (n=200)	Incidence rate ratio (95% CI)*
Serious adverse events† (from baseline to three months after stroke)				
Median (interquartile range) follow-up (days)	68 (56-78)	69 (54-77)	66 (56-78)	
Total No	22	9	31	
Incidence rate/100 person months (95% CI)	13.19 (9.22 to 18.86)	7.28 (4.39 to 12.08)	10.38 (7.75 to 13.90)	1.81 (0.97 to 3.36)
Cardiovascular event	0	0	0	-
No with recurrent stroke	8	3	11	-
Incidence rate/100 person months (95% CI)	3.52 (1.76 to 7.03)	1.46 (0.47 to 4.52)	2.54 (1.41 to 4.58)	2.41 (0.64 to 9.10)
No of hospital admissions	14	5	19	-
Incidence rate/100 person months (95% CI)	6.15 (3.64 to 10.39)	2.43 (1.01 to 5.83)	4.39 (2.80 to 6.87)	2.53 (0.91 to 7.04)‡
No of deaths	0	1	1	-
Incidence rate/100 person months (95% CI)	-	0.49 (0.07 to 3.45)	0.23 (0.03 to 1.64)	0.30 (0.01 to 7.42)‡

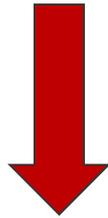
Fazit



Erstes großes multizentrisches RCT



Keine Überlegenheit von aeroben Training



Mehr unerwünschte Ereignisse in der Trainingsgruppe



Agnes Flöel, Martin Ebinger, Matthias Endres,
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