

Table III - Studies with a 6-month treatment protocol included in the systematic review

Author (year)	Mundbjerg <i>et al.</i> (2018) [23]	Mundbjerg <i>et al.</i> (2018) [24]	Murai <i>et al.</i> (2019) [27]	Noack-Segovia <i>et al.</i> (2019) [28]
Sample	60 (M = 18; W = 42) IG = 32 CG = 28 (42.3 ± 9.1 years) 12 to 24 months after BS	60 (M = 18; W = 4) IG = 32 CG = 28 (42.3 ± 9.1 years) 12 to 24 months after BS	W = 70 IG = 35 (40.0 ± 7.8) CG = 35 (42.1 ± 8.2) 3 months after BS	43 (M = 32; W = 11) IG = 21 CG = 22 (33 ± 6.9 years) 1 month after BS
Duration/Weekly/Frequency of the physical exercise protocol	6 months 2x week	6 months 2x week	6 months 3x week	6 months 3x week
Physical exercise protocol	ST 15min CYCLE 6-20 PSE + 10min OPC 50% VO ₂ max ↑ 50 to 70% ↑ 70% ST 10min MMSS LE; PD; SUP 20 REP 60% 1RM ↑ 15 rep 65% 1RM ↑ 10 rep 75% 1 RM	ST 15min CYCLE + 15min OPC ST 10min MMSS IP: 50% VO ₂ max to FP: 70%	AEROB 30 to 60min (↑ 10 min every 4 weeks) WALK TREAD (50%) ST 3x 8 to 12 rep MMII + MMSS LG; EX leg; 1/2 SQUAT; SUP; PD ROWING and CALF w/ 60 RECOV ↑ 5% load	AEROB 30min WALK TREAD 54% ↑ 59% HRdRes ST 15min MMSS BIC; TRIC; DELT; PEIT ↑ INT and REP 1RM CYCLE 15min STRETCH MMII + MMSS w/ BREATH
Variables of interest	BC MS MMSS MS LLLL	BC VFV	BMD VOL. DMO BC MRO	BC MS
Instruments	ANTHROP DINAM SSL LCT	ANTHROP SCANNER	DEXA HR-Pqct EXBIO	BIA DINAM
Findings	IG X CG BM 12 months: IG = CG BM 24 months: IG ↓ 0.1 kg x CG ↑ 2.1 kg MS MMII: IG ↑ 8.3N MS MMSS: IG = CG	IG X GC BM 12 months: GI = CG BM 24 months: IG ↓ 0.1 kg x CG ↑ 2.1 kg PSV: IG = CG WHR: IG = CG	ST ↓ the loss of BMD in the FEM, QUADR and DR and ↓ collagen type I C-telopeptide, procollagen and sclerostin	IG X CG (after 6 months) BM: IG = CG MS: IG = CG MM: IG = CG FM: IG = CG

*IG = Intervention Group; CG = Control Group; WHR = Waist-Hip Ratio; BS = Bariatric Surgery; MS = Muscle Strength; AEROB = Aerobic training; ST = Strength training; HRR = Reserve Heart Rate; MMSS = Upper Limbs; LLLL = Lower Limbs; PSE = Perception of Effort; Rep = Repetitions; INT = Intensity; 1RM = one maximum repetition; BM = Body Mass; BC = Body Composition; FM = Fat Mass; FFM = Fat-Free Mass; BMD = Bone Mineral Density; IWT = Incremental Walking Test; HR = Heart Rate; LP = Leg Press; SIT = Sit-ups; PUSH = Push-ups; EX = Extensions; ELB = Elbow; KNEE = Knee; FF = Physical Function; OPC =

Optional; IP = Initial Phase; FP = Final Phase; VFV = visceral fat volume; WALK = Walking; STEP = "stepping"; "=" = no significant difference; HGS = Handgrip Strength; FC = Functional Capacity; TREAD = Treadmill; DINAM = Dynamometer; MF = Muscle Function; SSL = Sit and Stand Up Test; STRETCH = Stretching; ANTHROP = Anthropometry; LCT = Ladder Climbing Test; AFV = Abdominal Fat Volume; BIA = Bioimpedance; DEXA = Bone Densitometry; VOL= Volume; HR-pQCT = high-resolution peripheral quantitative computed tomography; BRM = Bone Remodeling Markers; EXBIO = Biochemical Tests; HRdRes = Capacity and Frequency of Resistance; QUADR = Quadriceps; HAMS = Hamstrings; BIC = Biceps; TRIC = Triceps; DELT = Deltoid; PEIT = Pectoral; CYCLE = Cycle ergometer; BREATH. = Breathing Exercises; LM = Lean Mass; HRmax = maximum heart rate; RECOV = Recovery; LE = Lateral elevation; PULL = Pull or Pull Down; BENCH = Bench press; SQUAT = Squat; CALF = Calf; FEM = Femur; DR = Distal Radio