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Title (type in CAPITAL LETTERS, leave one blank line before the text) A PROSPECTIVE RANDOMISED STUDY COMPARING FEMISCAN™ HOME TRAINER AND PELVIC FLOOR MUSCLE TRAINING ALONE

Aim of Study To compare pelvic floor muscle training (PFMT) based on FemiScan™ Home Trainer with PFMT alone in female stress urinary incontinence (SUI) Preliminary results are presented.

Methods During the years 1998-1999 thirty urodynamically tested SUI women without previous incontinence operations were sent from gynecological outpatient clinic to a physiotherapist for PFMT Patients were randomised either to FemiScan™ or to control group All the patients visited the physiotherapist five times and PFM forces were measured at each visit during the twelve weeks' treatment period All patients were advised to practice 20 minutes per day five times a week FemiScan™ is a device based on surface electromyography (EMG) for clinical and home use FemiScan™ Home Trainer monitors exercises and is supplied with headphones and recorded instructions.

The outcome measures were pad test, leakage index, social activity and pelvic floor muscle activity All patients were asked to keep a training diary

Results The characteristics of the patients are seen in table 1 There were 15 patients in both groups. One patient interrupted the use of FemiScan™ and continued training without it In FemiScan™ group Home Trainer recorded from 10 to 131 training sessions, mean 69 In the training diaries 24 out of 30 patients marked 54 training days (min 6, max 93)

Significant changes could be seen in the pad test ($p=0.01$), muscle activities ($p=0.003$) and the leakage index ($p=0.025$) with all patients In the FemiScan™ group the leakage index ($p=0.015$) was significantly better than in the control group Muscle forces (fig 1) increased in both groups and the increase seemed greater in the FemiScan™ group but the difference is not statistically significant

The mean follow-up time after the treatment period was 12 months (min 1, max 19) and during that time seven patients were operated on, two from the FemiScan™ group and five from the control group

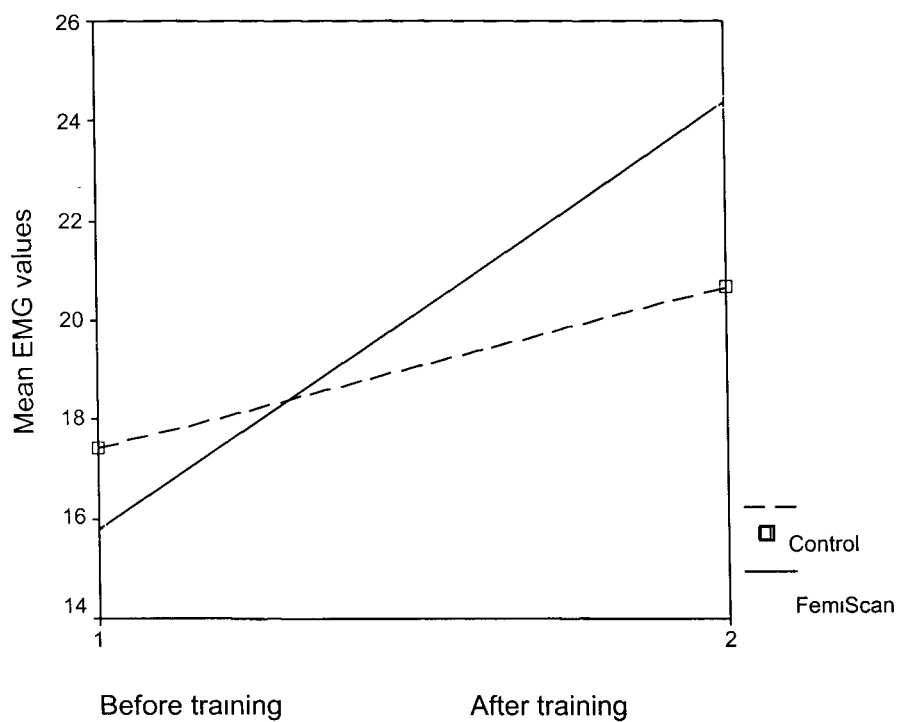
Conclusion PFMT done at home can be monitored with the FemiScan™ Home Trainer system These preliminary results show a light but not a significant improvement in PFMT outcome measures in the FemiScan™ group compared with the control group. The study is ongoing.

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Table 1. Participants N = 30

	Mean	Min	Max
Age	51,3	31	69
BMI	25,8	21	36
Number of vaginal deliveries	2,7	0	7

Fig 1. The progress of pelvic floor muscle activities



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