

# The Effects of Combination Therapy with Electroacupuncture and Pelvic Floor Muscle Training on Stress Urinary Incontinence Following Radical Prostatectomy: the Initial Report from a Randomized Controlled Trial

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## Aims of study

To analyze the effectiveness of combination therapy with **electroacupuncture(EA) and pelvic floor muscle training(PFMT) for the treatment of stress urinary incontinence(SUI) after radical prostatectomy** and its superiority over pelvic floor muscle training alone.

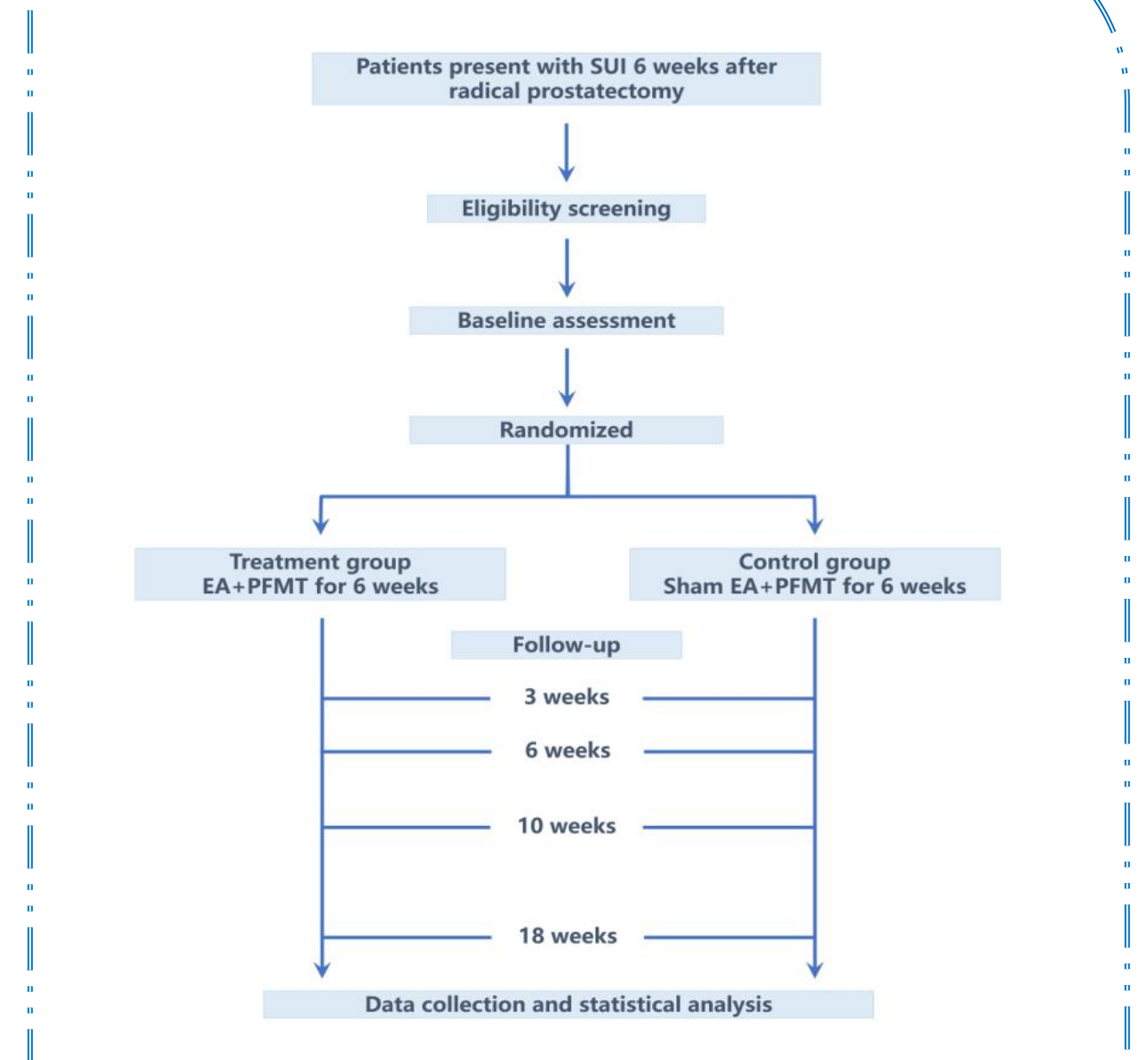
## Study design, materials and methods

Forty-two patients with stress urinary incontinence 6 weeks after radical prostatectomy were randomly divided into experimental group (22 cases) and control group (20 cases). The experimental group was treated with pelvic floor muscle training combined with EA, while the control group received pelvic floor muscle training combined with placebo EA. The sessions were lasted for a total of 6 weeks with three times a week on alternate days. Patients were evaluated at week 3, 6, 10 and 18 after the initiation of treatment. The primary outcome was the change of urine leakage from baseline during 1h pad test at 6 weeks. The secondary outcomes were the changes of ICIQ-UI-SF score, reduction of mean 24-hour pad number, success rate (over 50% reduction from baseline of 1h pad test result at the end of trial) and adverse events. The registration information can be accessed on ClinicalTrials.gov (NCT05773716).

**Table.** Demographic and baseline clinical characteristics.

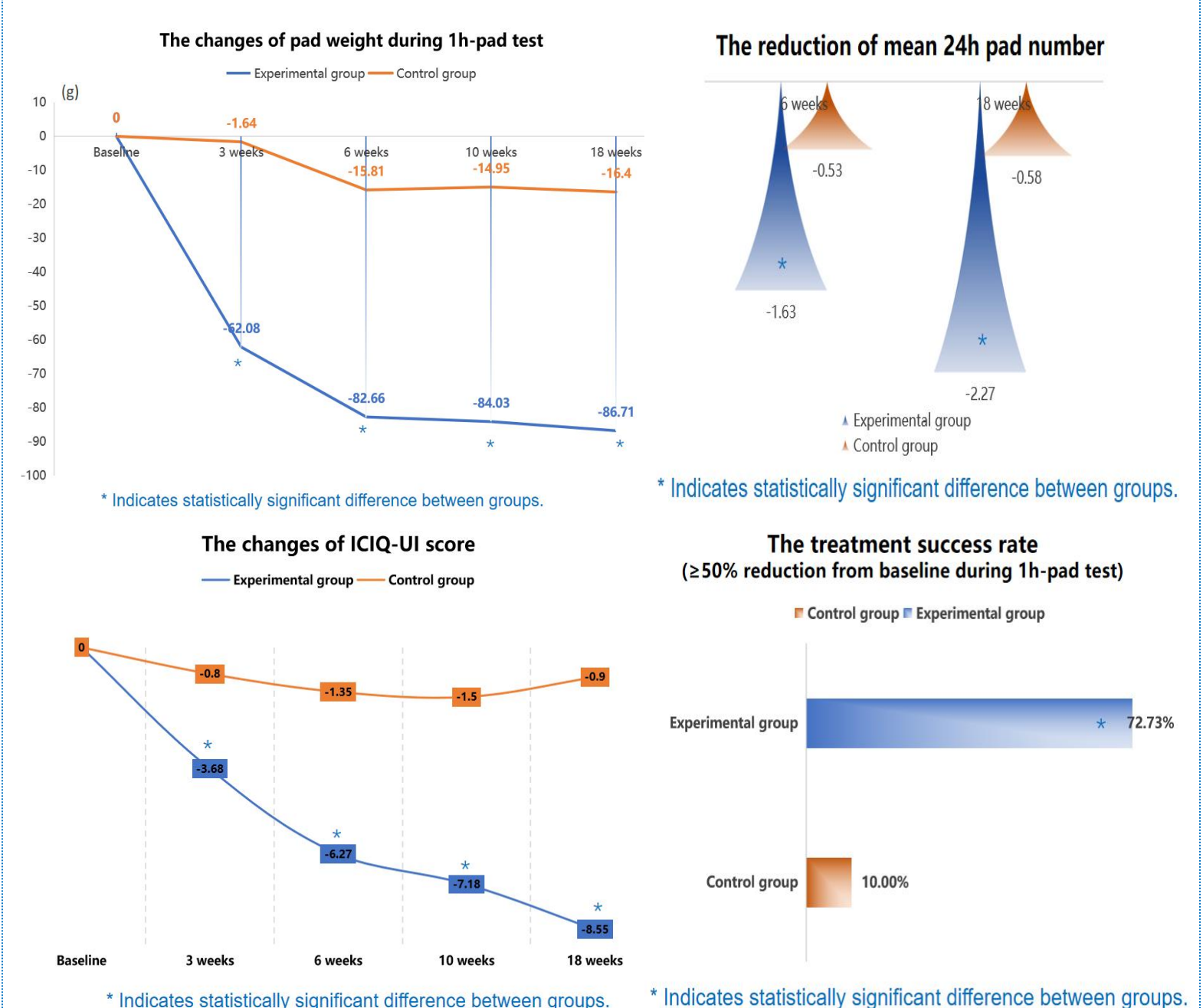
Characteristics	Experimental group(N=22)	Control group(N=20)	P value
Age,mean(SD),years	72.64(4.98)	71.20(5.43)	0.376
BMI,mean(SD),kg/m <sup>2</sup>	23.28(2.84)	24.06(2.67)	0.273
Smoking,n(%)	5(22.73)	6(30)	0.687
Prostate volume,mean(SD),ml	55.08(17.88)	45.58(16.71)	0.062
Comorbidities,n(%)	14(63.64)	13(65)	0.927
Post_operative Gleason score,n(%)			
6	4(18.18)	2(10)	0.463
7	16(72.73)	14(70)	
8	1(4.5)	4(20)	
9	1(4.5)	0	
Post_operative pathological staging,n(%)			
T2a-T2c	17(77.27)	18(90)	0.438
T3a-T3b	4(18.18)	2(10)	
T4	1(4.5)	0	
Duration between surgery and enrollment,mean(SD),days	348.77(316.44)	440.55(806.05)	0.990
Lymph node dissection,n(%)	3(13.64)	2(10)	0.716
Neurovascular preservation,n(%)	3(13.64)	6(30)	0.197
1h pad test,mean(SD)	108.17(88.83)	64.50(59.31)	0.102
ICIQ-UI score,mean(SD)	17.27(3.04)	15.90(3.93)	0.281
Mean 24-hour pad number,mean(SD)	3.94(2.77)	4.20(3.44)	0.990

**Figure.** Study design.



## Results

The findings of our study suggested that pelvic floor muscle training combined with EA significantly reduced urine leakage symptoms and improve quality of life in patients with stress urinary incontinence after radical prostatectomy.



## Conclusions

**Combination therapy with EA and pelvic floor muscle training is more superior than traditional pelvic floor muscle training alone in treating stress urinary incontinence after radical prostatectomy.**

However, further data based on larger sample size and long-term follow-up is still expected.