

SPECIFIC ELECTROSTIMULATION IN PATIENTS WITH SEVERE LOW ANTERIOR RESECTION SYNDROME AFTER INFERIOR RECTAL CANCER RESECTION: AN ALTERNATIVE WITH FAVORABLE CLINICAL OUTCOMES? ABSTRACT 718

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Hypothesis / aims of study

The development of low anterior resection syndrome (LARS) after rectal surgery for cancer treatment is multifactorial, and an increasing number of options have been discovered to improve the quality of life of patients with rectal cancer. However, improving the quality of life in these patients remains a therapeutic challenge.

This original study aims to evaluate the clinical outcomes of patients with severe low anterior resection syndrome (LARS) after total meso-rectal resection for colorectal cancer who underwent specific anal electrostimulation in a Latin American colorectal surgery center between 2018 and 2023.

Study design, materials and methods

An analytical retrospective cohort study was conducted.

Inclusion Criteria: patients referred to the anorectal physiology unit of the coloproctology service of a high complex hospital in Latin-American for severe low anterior resection syndrome who underwent specific electrostimulation between 2018 and 2023.

Exclusion Criteria: metastasis, neoplastic recurrence and less than 12 months after surgery

Specific electrostimulation therapy (SET)

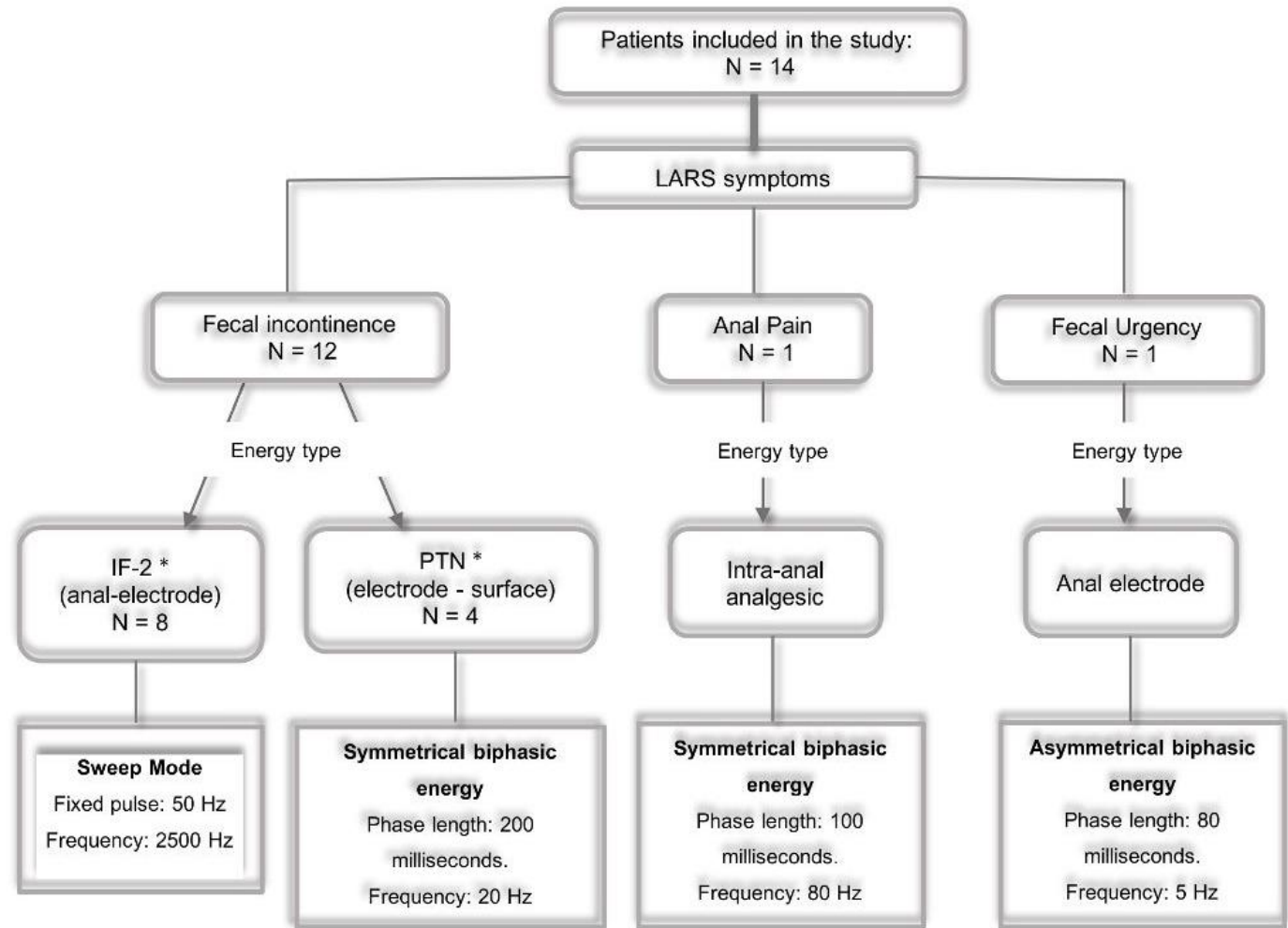


Patients were placed in left lateral decubitus position.

An anal electrode connected to an electrical generator and a computer with software were used.

Chattanooga Intelect advanced equipment was used.

Electrostimulation therapy parameters



* IF-2 = 2-pole interferential energy; PTN = Posterior tibial nerve

Outcomes and measures: Sociodemographic variables, tumor characteristics, symptoms at the time of consultation, and extension studies (high-resolution manometry and endoanal ultrasound) were analyzed. The Low Anterior Resection Syndrome Score (LARS-S) and the Jorge Wexner Fecal Incontinence Score (Wexner) were used to measure quality of life before and after treatment.

Statistical analysis: comparison between scores before and after electrostimulation therapy was performed using wilcoxon signed rank test with correction for continuity, and a difference of p < 0.05 was considered statistically significant

Results and interpretation

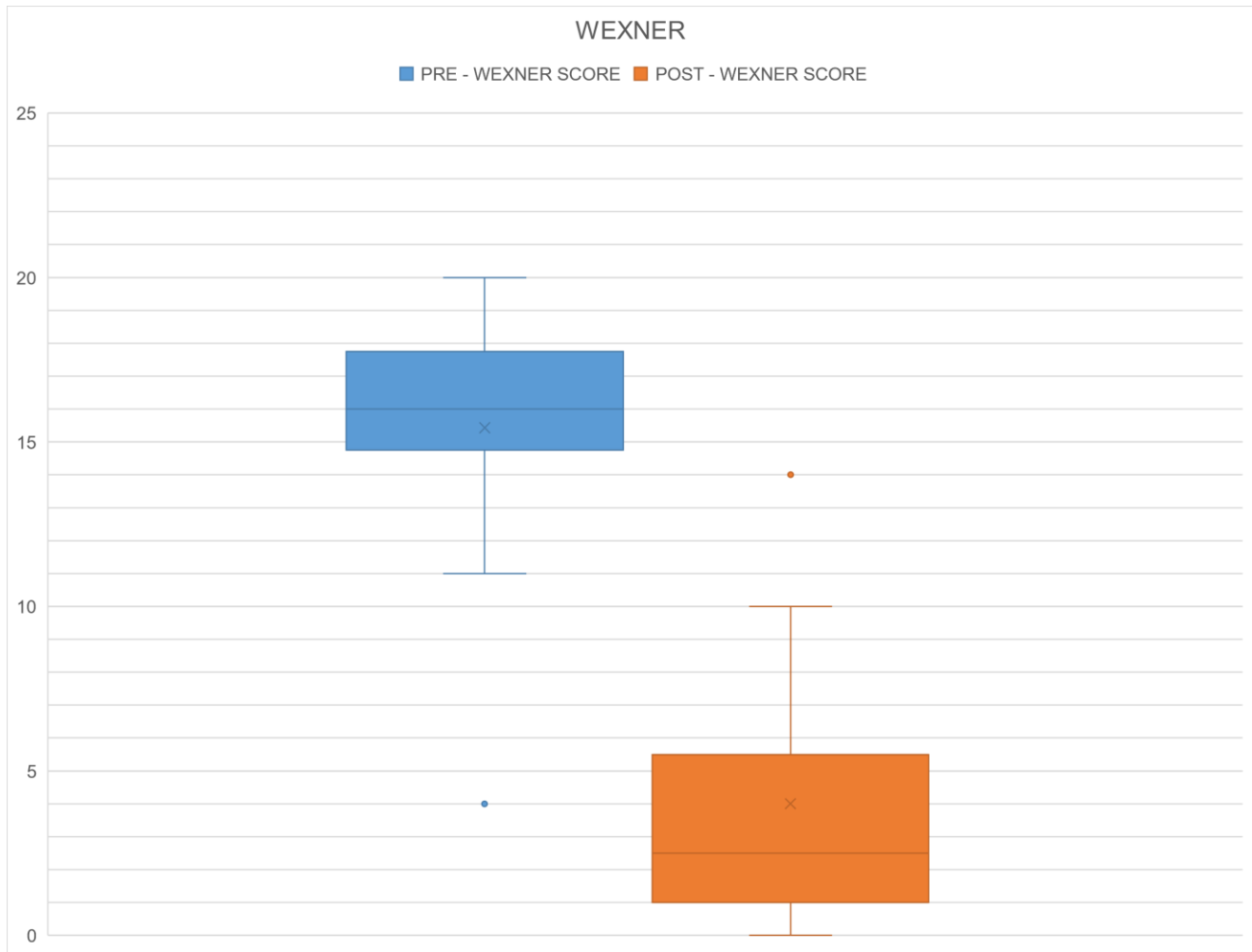
Sociodemographic and Clinical Characteristics		
Variable	n = 14 (%)	
Age, years	58 [IQR 48.5 - 69.5]	
Primary adenocarcinoma	14 (100.0)	
Tumor stage		
	IIIb	4 (28.6)
	IIIa	2 (14.3)
	IIa	2 (14.3)
	Others	6 (42.8)
Tumor distance from anal margin, centimeters	6 [IQR 4 - 9.5]	
Fecal incontinence	12 (85.5)	

Manometry and Rectal Ultrasound

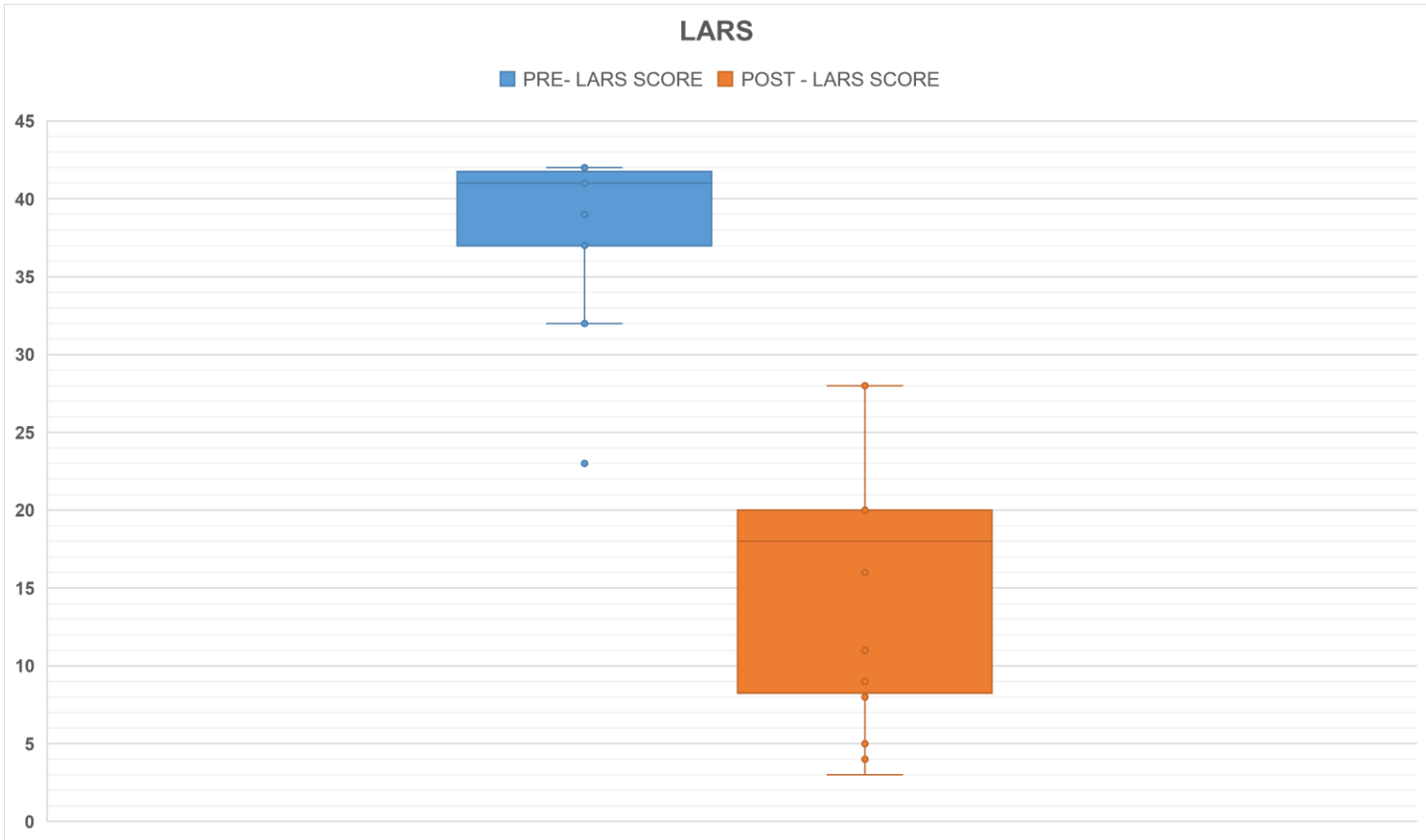
High Resolution Manometry	n = 14 (%)
Hyposensitivity	6 (42.8)
Hypersensitivity	4 (28.5)
Internal and external anal sphincter hypotonia	9 (64.3)
Rectal Ultrasound	n = 8 (%)
Fibrosis	1 (12.5)
Anal sphincter solutions	6 (75.0)

Outcomes after SET

Improvement after Specific Electrostimulation Therapy		
Fecal Incontinence Improvement	n = 12 (%)	
	90%	4 (33.3)
	80%	3 (25.0)
	70%	3 (25.0)
	60%	2 (16.7)



WEXNER SCORE		Wilcoxon test for dependent groups
Prior to SET	16.00 [15.00, 17.00]	p value = 0.001
After SET	2.50 [1.25, 3.75]	



LARS SCORE		Wilcoxon test for dependent groups
Prior to SET	41.00 [37.00, 41.75]	p value = 0.001
After SET	18.00 [8.25, 20.00]	

Conclusions

In our analysis, using this therapy was associated with at least a 70% improvement in fecal incontinence in 83.3% (10/12) of patients. This improvement was also demonstrated by the questionnaires used, and the difference was statistically significant in both instances. In the case of the LARS score, a median decrease of 23 points was found, while in Wexner a decrease of 13.5 points was found, showing a significant difference in quality of life after the application of the therapy.

Specific electrostimulation therapy may be an alternative treatment in patients with severe low anterior resection syndrome.

References

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