



TREATMENT OF MEN WITH ERECTILE DYSFUNCTION IN OUR SERVICE: AN EXPERIENCE REPORT



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HYPOTHESIS / AIMS OF STUDY

Erectile dysfunction (ED) is a public health problem with well-determined risk factors and manifestations that compromise the well-being and overall quality of life of affected individuals.[1] The prevalence of ED and its development are mostly related to restrictive or obstructive alterations in blood flow.[2] The clinical picture can worsen when a man feels vulnerable and embarrassed to seek treatment, often depending on a support network to access healthcare services.[2] Therefore, it is necessary to create procedures and protocols to facilitate men's access to healthcare services and to improve treatment adherence. Our service has a partnership with public management to improve service provision for men with ED. The aim of this study is to describe the management of a public health service focused on men with erectile dysfunction.

STUDY DESIGN, MATERIALS AND METHODS

This is a longitudinal observational study involving men of any age complaining of ED. The evaluation was conducted by a multidisciplinary team consisting of a pelvic physiotherapist, nurse, ultrasound physician, urologist, and psychologist. The patient data presented are from evaluations conducted between November 2021 and January 2024. All men were referred to the service from other public services or actively sought out assistance, and all of them scheduled for screening. Screening was performed by a nurse or physiotherapist who compiled all patient information, after which the patients were referred for evaluation with an ultrasound physician. During penile doppler ultrasound, the physician, accompanied by a physiotherapist and psychologist, explained all procedures, and patients were instructed to lie in a supine position with the exposed penis. An intracavernous injection inducing erection (provided by Flukka Laboratory) was administered at the base of the penis. At this point, Peak Systolic Velocity (PSV), Final Diastolic Velocity (FDV), and cavernous artery diameter data were collected using the MindRay DC-40 model equipment. Following evaluation, all men underwent 12 sessions of physiotherapy consisting of pelvic floor muscle training, low-intensity shock wave therapy, and non-ablative radiofrequency therapy. Throughout the follow-up, men who demonstrated psychological distress due to ED were suggested consultations with psychologists from our service. After the 12th session, men were reassessed.

Table 1. Sociodemographic and clinical data of men with ED.

Variables	n=189
Age (years)	63.9 (±9.9)
History of prostatectomy	139 (73.9%)
Diabetes	60 (31.7%)
Arterial Hypertension	105 (55.6%)
Urinary loss	141 (74.6%)
History of radiotherapy	22 (11.6%)
History of chemotherapy	3 (1.6%)
History of hormone therapy	5 (2.6%)

Source: Data collected from the service

RESULTS AND INTERPRETATION

189 men were admitted with a mean age of 63.3 years (±9.9). The highest percentage were men with urinary loss (74.6%), followed by prostatectomized men (73,9%) and hypertensive men (55.6%) (Table 1).

Regarding the data collected from penile doppler ultrasound upon their arrival at our service, the following values were found: for PSV, 28.8 cm/s (±16.0) on the left side and 28.9 cm/s (±16.6) on the right side. For FDV, 4.2 cm/s (±3.8) on the left side and 4.0 cm/s (±3.4) on the right side; and for the diameter of the cavernous artery before intracavernous injection, 0.55 mm (±0.16) on the right side and 0.51 mm (±0.15) on the left side. The diameter of the same artery under the effect of intracavernous injection was 0.69 mm (±0.16) on the right side and 0.69 mm (±0.16) on the left side. After the 12 sessions, the following values of 115 men were collected for PSV: 24.87cm/s (±13.1) on the left side and 26.21cm/s (±14.5) on the right side. Regarding FDV, 2.9 (±2.1) on the left side and 2.77 (±2.8) on the right side. As for the diameter of the cavernous artery before intracavernous injection, it was found to be 0.5mm (±0.15) on the right side and 0.51mm (±0.15) on the left side, and the diameter of the same artery under the effect of injection was 0.66mm (±0.15) on the left side and 0.65 (±0.14) on the right side (Table 2).

Table 2. Hemodynamic data before, baseline and after 12 physiotherapy sessions in our service.

Variables	Admission (n=189) (<i>m</i> ±DP)	Baseline (n=115)	After 12 sessions (n=115) (<i>m</i> ±DP)	valor de p
Right PSV (cm/s)	28.9±16.6	30.2±17.8	26.2±14.5	0.035
Left PSV (cm/s)	28.8±16.0	30.1±17.7	24.9±13.1	0.006
Right FDV (cm/s)	4.0±3.4	4.0±3.7	2.8±2.8	0.002
Left FDV (cm/s)	4.2±3.8	4.2±4.0	3.0±2.7	0.004
CA right before (mm)	0.55±0.16	0.49±0.1	0.5±0.15	0.553
CA left before (mm)	0.51±0.15	0.49±0.13	0.51±0.15	0.589
CA right after (mm)	0.69±0.16	0.67±0.14	0.65±0.14	0.092
CA left after (mm)	0.69±0.16	0.68±0.14	0.66±0.15	0.177

Sources: Data collected from the service

Legend: PSV: Peak Systolic Velocity; FDV: Final Diastolic Velocity; CA: Cavernous Artery Diameter.

One of the characteristics observed in these patients was their average age, these are men who are showing the first signs of androgenic dysfunction, which requires a systemic approach due to reduced testosterone levels in the blood [2]. Regarding hemodynamic findings, we can affirm that the majority of men have erectile dysfunction due to arterial insufficiency (PSV<30cm/s), this finding is consistent when considering the profile of the sample composed of men with a history of conditions resulting in poor circulation [1,3]. When comparing the hemodynamic values from the initial evaluation and reassessment, we observed no improvement, suggesting that more physiotherapy sessions are needed in patients with chronic conditions to allow time for vascular improvement. Another striking finding is the loss of 64 patients (33.9%) who did not undergo reassessment, indicating a pattern of low adherence to seeking and maintaining treatment, possibly due to a culture of chauvinism that makes men uncomfortable showing sexual vulnerabilities.

CONCLUSIONS

In our service, we have a sample of men with chronic conditions that lead to the development of ED due to arterial insufficiency and who showed no improvement after 12 physiotherapy sessions. To mitigate the low adherence of men with erectile dysfunction, it is necessary for healthcare services to develop health education strategies to raise awareness among this population.

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