CONCLUDING MESSAGE

This large multicentre prospective observational study in patients admitted for their first inpatient rehabilitation after SCI, showed that the method of bladder management changed significantly between admission and discharge: the use of indwelling catheter and assisted CIC decreased and normal voiding and CISC increased. The choice of method of bladder management is related to age, gender, SCI level, AIS classification and level of independence in self-care.

FIGURE 1

	Admission	Discharge
Method of bladder management	N (%)	N (%)
Normal voiding	564 (40.2)	787 (56.1)
CISC	109 (7.8)	312 (22.2)
Assisted CIC	240 (17.1)	57 (4.1)
Indwelling catheter	468 (33.4)	228 (16.3)
Other*	22 (1.6)	19 (1.4)

CISC = Clean Intermittent Self-Catheterization
CIC = Clean Intermittent Catheterization
* Other: Bladder reflex triggering, bladder expression (abdominal straining, Valsalva's maneuver, Credé maneuver), sacral anterior root stimulation, ostomy.

Method of bladder management in patients with SCI at admission to and discharge from first inpatient rehabilitation.

FIGURE 2

	Normal voiding	CISC	Assisted CIC	Indwelling catheter
Level of SCI	% (N)	% (N)	% (N)	% (N)
C2-C8 (N=528)	64% (337)	10.5% (56)	6% (32)	19.5% (103)
T1-T12 (N=454)	48% (218)	32% (147)	3% (11)	17% (78)
L1-S5 (N=211)	53% (112)	35% (74)	2% (5)	10% (20)
AIS classification				
A (N=151)	1% (2)	57% (86)	8% (12)	34% (51)
B (N=109)	23% (25)	33% (36)	7% (8)	37% (40)
C (N=186)	38% (70)	28% (52)	8% (15)	26% (49)
D (N=788)	76% (600)	13% (106)	2% (14)	9% (68)

SCI = Spinal Cord Injury
AIS = American Spinal Injury Association Impairment Scale
CISC = Clean Intermittent Self-Catheterization
CIC = Clean Intermittent Catherization

Method of bladder management in patients with different levels of SCI and AIS classification.

REFERENCES

1. Cameron AP, Wallner LP, Tate DG, Sarma AV, Rodriguez GM, Clemens JQ. Bladder management after spinal cord injury in the United States 1972 to 2005. J Urol. 2010 Jul;184(1):213-7.
2. Nachtegaal J, van Langeveld SA, Slootman H, Post MWM; Dutch-Flemish Spinal Cord Society. Implementation of a Standardized Dataset for Collecting Information on Patients With Spinal Cord Injury. Top Spinal Cord Inj Rehabil. 2018 Spring;24(2):133-140.
3. Biering-Sørensen F, Craggs M, Kennelly M, Schick E, Wyndaele JJ. International lower urinary tract function basic spinal cord injury data set. Spinal Cord. 2008 May;46(5):325-30.

Funding Quality Foundation of Dutch Medical Specialists (SKMS; grant no. Z69044861) **Clinical Trial** No **Subjects** Human **Ethics not Req'd** Retrospective study using anonymised data. No personal information is entered in the national database. Instead, participating rehabilitation centers use a local or a study-specific code number to enter and trace their patients in the national database. **Helsinki** Yes **Informed Consent** Yes

524

www.ics.org/2021/abstract/524

FEMININE GENITAL HYPERCHROMIA: A CASE CONTROL STUDY

Alves R[1], Ramos A[1], Nolasco J[1], Lemos A[1], Brasil C[1], Pitiá A[1], Campos G[1], Gomes T[1], Brito V[1], Matos L[1], Maia J[1], Jesus T[1], Rocha V[1], Ferreira R[1], Alves I[1], Ferreira I[1], Lobo J[1], Fontes A[1], Piason L[1], Alencar C[1], Coutinho J[1], Cardoso R[1], Pavie M[1], Lordelo P[1]

1. Patrícia Lordêlo´s Institute (IPL) - Pelvic Floor Care Center (CAAP) - Bahiana School of Medicine and Public Health

HYPOTHESIS / AIMS OF STUDY

The melasma is a type of hyperchromia that appears more regularly on the facial area, but can also be extra-facial, such as the genital area1. Genital hyperchromia directly interferes with self-image and can affect the sexual function and quality of life of the population studied, despite being poorly documented on the literature2. The causes are still not clear; therefore, the identification of the associated factors can help on the prevention and/or treatment of this common complaint. Nowadays, there are no studies describing the prevalence of the genital hyperchromia, arising the necessity of listing the frequency of this affection, thus showing its importance. The aim of this study is to evaluate the risk factors for genital hyperchromia and the impact on women's quality of life.

STUDY DESIGN, MATERIALS AND METHODS

This is a case-control study, involving 135 women. The case was defined on women with the complaint of darkening of the genital area and confirmed by the team of physicians and physiotherapists of the service. For the control group, women with no complaints of darkening in the genital region, picked up in the attendance list of educational events held by the Pelvic Floor Care Center (CAAP) in Salvador and the metropolitan region, were included. Those who were not proficient in Portuguese, pregnant women, or women with genital congenital malformations were excluded of the study.

The participants were directed to an individualized room and answered a questionnaire with sociodemographic information and variables that the researchers considered to be related to hyperchromia of the genital region, such as hypothyroidism, facial Melasma, folliculitis, dermatitis, other dermatological pathologies, sun exposure, use of tight clothing, composition of underwear and type of hair removal.

The study participants also answered the Melasma Quality of Life Scale questionnaire in the version adapted for Por-

tuguese (MelasQol-BP). MelasQol-BP assesses quality of life in women with melasma. This questionnaire consists of ten specific items for measuring the quality of life of people with melasma. It comprises three areas: social life, recreation / leisure and emotional well-being. On a scale of 1 (not at all disturbed) to 7 (disturbed all the time), the patient must inform how she feels about each item. The final MELASQoL-BP score can vary between 7 and 70, with higher values indicating worse quality of life.

The data collection was carried out from June to August 2020 at the Patrícia Lordelo Institute (PLI), in Salvador – Bahia, and also through an online questionnaire due to the pandemics.

The logistic regression model was used to assess the risk factors in the occurrence of the outcome of genital hyperchromia. After a univariate analysis, the independent variables were inserted into the logistic model if they had a $p < 0.20$, remaining in the model if they continued with the statistically significant of $p < 0.05$. The results were presented using Oddsratio and its respective 95% confidence interval. This research was approved by the Research Ethics Committee and all participants signed the Free and Informed Consent Form.

RESULTS

A total of 91 women were evaluated in the group with genital hyperchromia and 44 women in the control group. The average age for the groups was, respectively, 31.3 ± 11.7 and 26.4 ± 10.7 years. The variables facial melasma ($p = 0.043$), type of hair removal ($p = 0.004$), sun exposure ($p = 0.026$) and underwear composition ($p = 0.020$) were directly related to the condition of hyperchromia. After the logistic regression analysis of the independent variables melasma facial, type of hair removal, sun exposure, underwear composition and age, there was an influence of the variables of age ($p = 0.033$) and type of hair removal ($p = 0.000$) as risk factors for genital hyperchromia. The score of the MelasQol questionnaire in the group of women with hyperchromia had an average of 29.03 ± 13.78 points.

INTERPRETATION OF RESULTS

It has already been described that, in the facial region, the use of oral contraceptives or hormone replacement therapy, pregnancy, sun exposure, endocrinopathies and genetic predisposition are triggering factors for the development of melasma3. For the genital region, it is possible to consider age and type of hair removal as risk factors for genital hyperchromia. It is believed that age is related to the influence of hormonal factors and the type of hair removal to the physiopathological mechanisms of melasma, which is the increase of melanin production as a response of the tissue to aggression.

The sun exposure and underwear composition are also aggressions to the tissue and should be investigated in patients with hyperpigmentation in the genital region. The presence of facial melasma can be a factor to be evaluated, since women are more susceptible to excessive production of melanin in certain regions of the body. The MelasQol score obtained in this study may not have been so high when compared to the other studies. However, it is important to note that the analyzed area is the genital, which is a body area that is less exposed to UV radiation in everyday life when compared to other bodily domains such as the face.

CONCLUDING MESSAGE

Based on our results, can be inferred that age and the type of hair removal have influence for this dyschromia. In addition, we demonstrate that intimate aesthetics has a strong impact on women's quality of life, especially in relation to self-esteem. Because of this, the search for constant treatments has been growing in order to resume this emotional well-being, which is associated with what the media establishes as a standard of beauty in the present times.

FIGURE 1

Variables	Hyperchromia (n=91)	Control (n=44)	P value
Hypothyroidism	03 (3,3)	03 (7,0)	0,403
Facial Melasma	18 (20,5)	03 (6,8)	0,043
Folliculitis	15 (16,5)	02 (4,5)	0,141
Dermatitis	16 (17,6)	10 (22,7)	0,477
Others dermatological pathologies	18 (19,8)	09 (20,5)	0,141
Sun exposure	47 (52,2)	14 (31,8)	0,026
Use of tight clothes	69 (75,8)	32 (72,7)	0,698
Underwear composition			0,020
Lycra	30(33,0)	05(11,4)	
Cotton	28(30,8)	15(34,1)	
Both	33(36,3)	24(54,5)	
Type of hair removal			0,004
Blade	55 (60,4)	18(40,9)	
Hot wax	24 (26,4)	07(15,9)	
Phototherapy	10 (11,0)	14 (31,8)	
Cold wax	01(1,1)	02 (4,5)	
Don't shave	01(1,1)	03 (6,8)	

Description of the clinical characteristics of women with genital hyperchromia. Salvador-Bahia, 2020.

FIGURE 2

Variables	Exp(B)	CI 95%	P value	Exp (B)	CI 95%	P value
Age	0,129	0,002-0,013	0,146	0,176	0,001-0,014	0,033
Underwear composition	0,029	0,077-0,108	0,737			
Type of hair removal	0,266	0,166-0,037	0,002	0,309	0,179-0,056	0,000
Sunlight exposure	0,156	0,013-0,309	0,071			
Facial melasma	0,128	0,062-0,392	0,153			

Table 2 – Univariate and multivariate logistic regression of the characteristics of women with genital hyperchromia.

REFERENCES

1. GONCHOROSKI, D. D.; CORREA, G. M. Tratamento de hipercromia pós-inflamatória com diferentes formulações clareadoras., Infarma, v. 17(3/4), p. 84–8, 2005.
2. MULLER, I.; RESS, A. Melasma and Endocrine Disorders, Pigmentary Disorders, v. 1, n. 6, p. 1–4, 2014
3. ORTONNE, J.P.; et al. A global survey of the role of Ultraviolet Radiation and hormonal influences in the development of melasma. J Eur Acad Dermatol Venereol. v. 23, p. 1254-1262, 2009.

Funding No **Clinical Trial** No **Subjects** Human **Ethics Committee** Bahiana School of Medicine and Public Health **Helsinki** Yes **Informed Consent** Yes

525

www.ics.org/2021/abstract/525

NON-ABLATIVE RADIOFREQUENCY IMPROVES HEMODYNAMIC PARAMETERS IN PATIENTS WITH ERECTILE DYSFUNCTION: PRELIMINARY DATA.

Mamede C[1], Quibervile A[1], Sodré P[1], Cerqueira M[1], Sodré D[1], Teles A[1], Canário A[1], Marianno A[1], Alencar C[1], Cantharino C[1], Balthazar C[1], Jorge D[1], Pereira I[1], Oliveira I[1], Santos J[1], Coutinho J[1], Piason L[1], Zuza M[1], Oliveira M[1], Freire P[1], Gomes T[1], Brito V[1], Matos R[1], Lordelo P[1]

1. Patrícia Lordêlo´s Institute (IPL) - Pelvic Floor Care Center (CAAP) - Bahiana School of Medicine and Public Health

HYPOTHESIS / AIMS OF STUDY

Radiofrequency can raise penile blood flow, improving hemodynamic parameters enhancing erection quality./ To observe the effect of radiofrequency on hemodynamic parameters in men with erectile dysfunction

STUDY DESIGN, MATERIALS AND METHODS

This shows preliminary data from two patients. Inclusion criteria were age between 30 and 80 years and the presence of erectile dysfunction complaints. Exclusion criteria were history of neurological disease, diabetes mellitus, Peyronie's disease, psychiatric diseases, patients with anatomical malformations in the genital region and premature ejaculation. The patients underwent 8 sessions of non-ablative radiofrequency at 41ºC for two minutes using the Ibramed Neartek® equipment. To assess the erection function of patients, the International Index of Erectile Function 5 (IIEF-5) was applied. In addition, hemodynamic data such as systolic velocity peak and end diastolic velocity were collected in the right cavernous artery (RCA) and left cavernous artery (LCA) by doppler ultrasound of the penis.

RESULTS

The patient M.A.O.V. scored 11 before the application of eight sessions of non-ablative radiofrequency, and 25 at the endo f it, in the IIEF-5 questionnaire. He reached an initial systolic velocity peak of 41 cm/s on the RCA, and 37 cm/s on the LCA, before the intervention; and 43 cm/s on the RCA and 35 cm/s on LCA, after the intervention. The end diastolic velocity of this patient reached 15 cm/s on the RCA, and 10 cm/s on the LCA before the intervention; and an end diastolic velocity of 8 cm/s on the RCA and 0 cm/s on the LCA, after the intervention.

The patient M.A.O.V. scored 7 before the intervention and 8 at the end, in the IIEF-5 questionnaire. He reached an initial peak systolic velocity of 31 cm/s on the RCA, and 62 cm/s on the LCA, before the intervention; and 25 cm/s on the RCA, and 61 cm/s on the LCA, after the intervention. Regarding the end diastolic velocity, the same patient reached 10 cm/s on the RCA, and 17 cm/s on the LCA before the intervention; and 0 cm/s on the RCA and 15 cm/s on the LCA, after the intervention.

INTERPRETATION OF RESULTS

As observed in the results, both patients showed improvement in hemodynamic values after the application of eight sessions of non-ablative radiofrequency, mainly in the end diastolic velocity, where values below 5 cm/s were reached, considered the cutoff point to exclude the veno-occlusive disease. This suggests that the formation of collagen provided by ionic movement seems to work better in patients who have occlusive venous erectile dysfunction, values confirmed by an increase in the IIEF-5 score.

CONCLUDING MESSAGE

Radiofrequency treatment suggested an improvement in hemodynamic parameters of the erectile dysfunction, based on the results evidenced in the patients included in the study. Thus, there are few data in the literature on such treatment in cases of erectile dysfunction, requiring a better scientific basis for the adequation of treatment for these patients. Therefore, radiofrequency treatment can be a therapeutic alternative for this population.