ENDOCRINOLOGICAL APPROACH OF INDIVIDUALS WITH GENDER DYSPHORIA (TRANSSEXUALITY):

EXPERIENCE OF A LARGE CENTER

Martins D¹, Bastos M^{1,6}, Baptista C¹, Fonseca L^{2,6}, Santos G^{2,6}, Carvalho G^{3,6}, Rolo F^{4,6}, Pinheiro S^{5,6}, Guelho D¹, Vicente N¹, Cardoso LM¹, Oliveira D¹, Lages A¹, Ventura M¹, Carrilho F¹

¹ Serviço de Endocrinologia, Diabetes e Metabolismo, Centro Hospitalar e Universitário de Coimbra, CHUC-HUC, E.P.E.; ³ Serviço de Ginecologia, Centro Hospitalar e Universitário de Coimbra, CHUC-HUC, E.P.E.; ⁴ Serviço de Urologia e Transplantação Renal, Centro Hospitalar e Universitário de Coimbra, CHUC-HUC, E.P.E.; ⁵ Serviço de Cirurgia Plástica, Reconstrutiva e Queimados, Centro Hospitalar e Universitário de Coimbra, CHUC-HUC, E.P.E.; ⁶ URGUS-Unidade de Reconstrução Génito Urinária e Sexual do CHUC, E.P.E.

INTRODUCTION: Gender dysphoria (GD) is featured by significant difference between the individual's expressed gender and the gender others would assign him or her, with marked distress in social and occupational functionality, according to DSM-V classification. We report the experience in the clinical evaluation and the results of hormonal therapy and sex reassignment surgery in a hospital center.

METHODS: It was conducted a retrospective analysis of 85 patients with GD, referred for clinical and psychological evaluation, hormone therapy and sex reassignment surgery (SRC) at the Genitourinary and Sexual Reconstruction Unit of Coimbra Hospital and University Centre (Portugal).

RESULTS

Clinical evaluation

Gender Reassignment:
M-F: 44.7% (n=38)
F-M: 55.3% (n=47)

M-F: male-to-female
F-M: female-to-male

Age	M-F	F-M	p
Clinical presentation	8.46±3.75	6.33±2.09	0.005*
First endocrinological evaluation	34.16±11.85	25.36±9.87	<0.001*
			*p<0.05; T-Student test

Associated diseases	M-F (n=38)		F-M (n=47)		p	Total
	n	%	n	%		
Type 2 Diabetes	2	2.4	0	0	: <u>-</u> -	2 (2.4%)
Thyroid disease ¹	1	1.2	6	3.5	-	7 (8.23%)
Neoplasia	0	0	1	1.2	_	1 (1.2%)
HIV	3	3.5	0	0	_	3 (3.5%)
HCV	1	1.2	0	0	-	1 (1.2%)
HBV	0	0	1	0	_	1 (1.2%)
Previous addiction	2	2.4	3	3.5		5 (5.9%)
Karyotype alteration ²	0	0	1	1.2	_	1 (1.2%)
Psychiatric disease	15	17.6	11	12.9	0.202*	26 (30.5%)
Self-medication	9	10.6	2	2.4	-	11 (12.9%)
Previous sex-reassignment	4	4.7	7	8.2	-	11 (12.9%)
surgery						
	¹ Autoir	nmune thyroiditis (3)	² Turner	Syndrome(1)	*p<0.05	; Mann Whitney Tes

MNG (3)
Papilar Carcinoma (1)

²Turner Syndrome(1)

p<0.05, Mann Whitney Test

Hormone Therapy

	M-F (n=38)		F-M	F-M (n=47)		Total
	n	%	n	%		
Hormone therapy	25	39.7	38	60.3	0.117*	63
Secondary effects	6	9.5	8	12.7	-	14

Peripheral edema (2) > Estradiol valerate; Medroxyprogesterone acetate

Cutaneous Rash (2)

Medroxyprogesterone acetate

Headaches (1) → Estradiol valerate

Acne (7) → Testosterone enanthate

Acute noisoning (1) → Medroxyproge

Acute poisoning (1) → Medroxyprogesterone acetate

Panic attacks (1) → Testosterone enanthate

There were no thromboembolic events

Duration of hormone therapy

	M-F	F-M	р
Duration of therapy (months)	48.23±56.45	41.89±46.62	0.886*

*p<0,05; Mann Whitney Test

Pharmaceutical groups used in hormone therapy

M-F

Estrogen therapy: n=25 (100%)
Antiandrogens: n=11 (44%)
Progestogens: n=8 (32%)

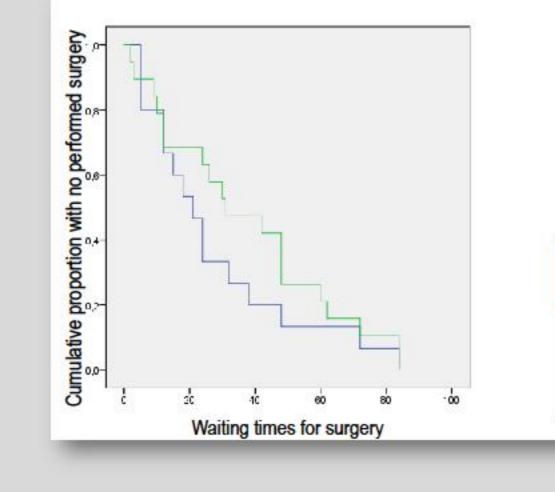
F-M

Testosterone enanthate: n=38 (100%)
Triptorelin acetate: n=23 (60.5%)

Surgical Therapy

	M-F (n=38)		F-M (n=47)		p	Total
	n	%	n	%		
Surgical Treatment	14	37.8	23	62.2	0.264*	37
Complications ¹	4	28 6	7	30.4		

¹Most frequent complication: persistent or relapsed urethral fistula *p<0,05; Mann Whitney Test



Time of waiting for surgery

M-F F-M p
Time of waiting for 23.64±18.88 39.55±27.89 0.056***
surgery (months)

*p<0.05; T-Student test

Most frequent surgical interventions

Surgical intervention	n (%)
Breast augmentation	7 (50%)
Vaginoplasty + Breast augmentation	5 (35.7%)
TAH+BSO + Vaginectomy + Bilateral	15 (65.2%)
mastectomy	
Bilateral mastectomy	7 (30.4%)
Phalloplasty	6 (26.1%)



CONCLUSIONS: It was found that 55.3% of patients pretended sex reassignment therapy from F-M. Most of the patients (74.1%) performed hormonal therapy without significant complications, so we can conclude that testosterone and estradiol treatment in physiological levels are effective and safe in female and male transsexual patients. Although 30% of operated patients had post-surgical complications, we consider that with increased clinical and surgical experience, long-term outcomes for transsexual persons should improve.

BIBLIOGRAPHY: Hembree WC *et al.*, Endocrine Treatment of Transsexual Persons: An Endocrine Society Clinical Practice Guideline, J Clin Endocrinol Metab, 2009, 94 (9):3132-3154; Leinung MC et al., Endocrine Treatment of Transsexual Persons: Extensive Personal Experience, Endocr Pract. 2013; 19 (No.4); Costa E. *et al.*, Clinical management of transsexual subjects, Arq Bras Endocrinol Metab, 2014; 58/2; Turan S *et al.*, Sociodemographic and Clinical Characteristics of Transsexual Individuals Who Presented to a Psychiatric Clinic Ffor Sex Reassignment Surgery, Turkish Journal of Psychiatry, 2015; World Profissional Association for Transgender Health: www.wpath.org









