

Sex Affirming Surgery

In male-to-female Transgenders



Επεμβάσεις Επιβεβαίωσης (Αλλαγής) του Φύλου σε από άνδρα-σε-γυναίκα Διαφυλικούς

Nikolaos A. Papadopulos, MD, PhD, FACS



Καθηγητής Πλαστικής Χειρουργικής

Professor of Plastic Surgery







Transsexualism / Gender Dysphoria

patients that physically and mentally feels to be fully assigned to the contra gender

Law Regulation

Since the 80s in Germany transsexualism is law regulated, as well as recognized and treated as a disease.

This legislation permits transsexual patients to change their names when two independent and appropriate psychological and/or psychiatric advisory judgments are positive.

However, a change of the patients' civil status is allowed only if permanent infertility and sex-adaptation within the genital area have been established by previous hormone therapy and surgery.

Consequently, there is a legal assignment for us surgeons to develop and perform such surgical procedures in order to improve the quality of life of these patients

Epidemiology

Approximately 23,000 people in Germany
have applied for sex reassignment surgery in the past 35 years
(German Society of Trans and Intersex Identity)

The number of cases increased for years and
currently would be about 1400 per year.





Male - to - Female

- Penectomy
- Orchiectomy
- Neovagina construction

- Breast augmentation
- Vocal cord surgery





Penile Inversion after George Burou

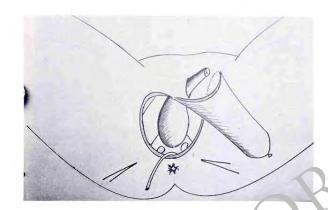


Figure 6. Penile skin invaginated.

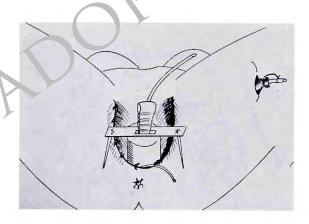


Figure 7. Stent in vagina.

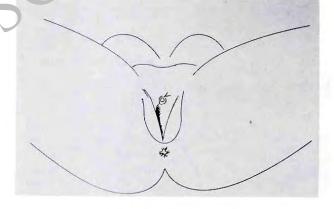


Figure 8. Postoperative view.

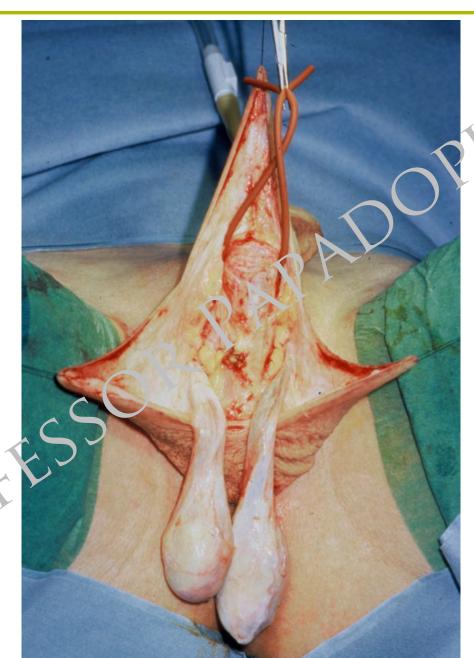










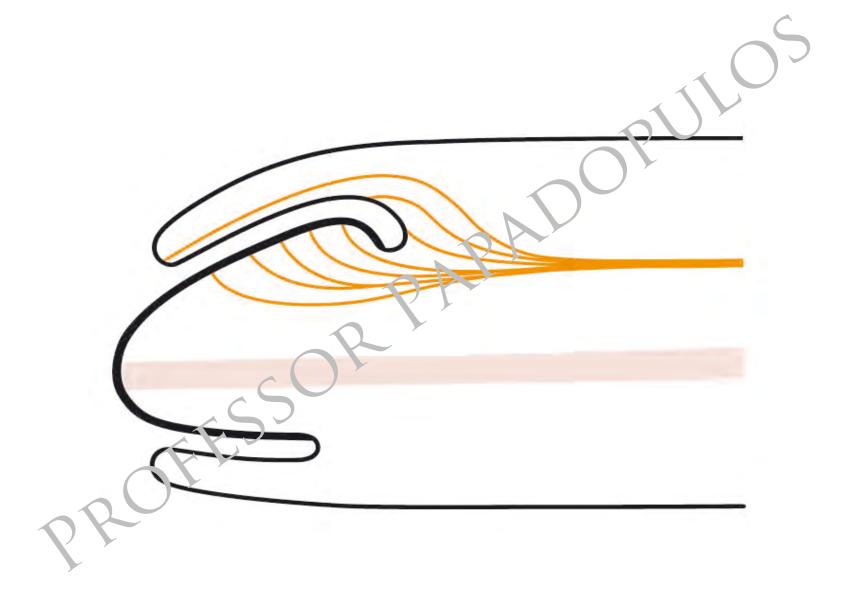




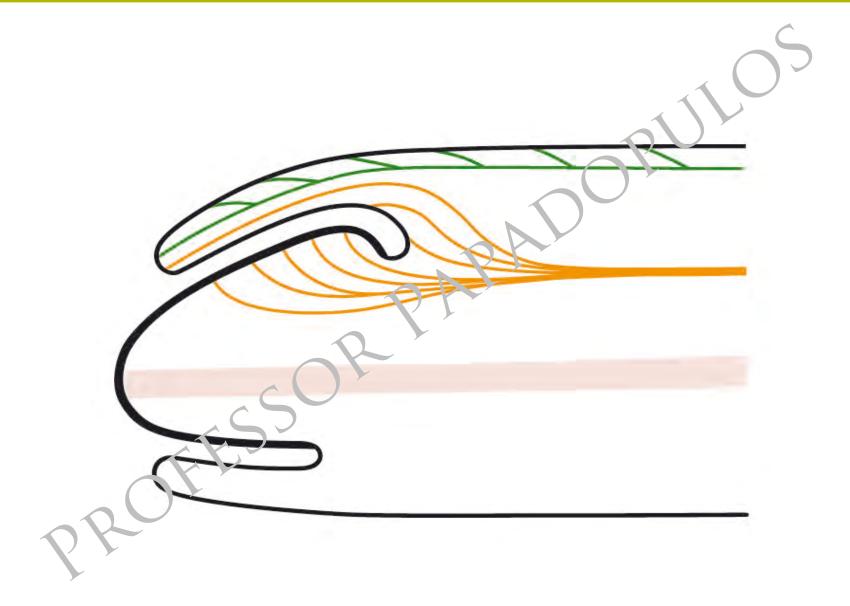
The Neo-Clitoris



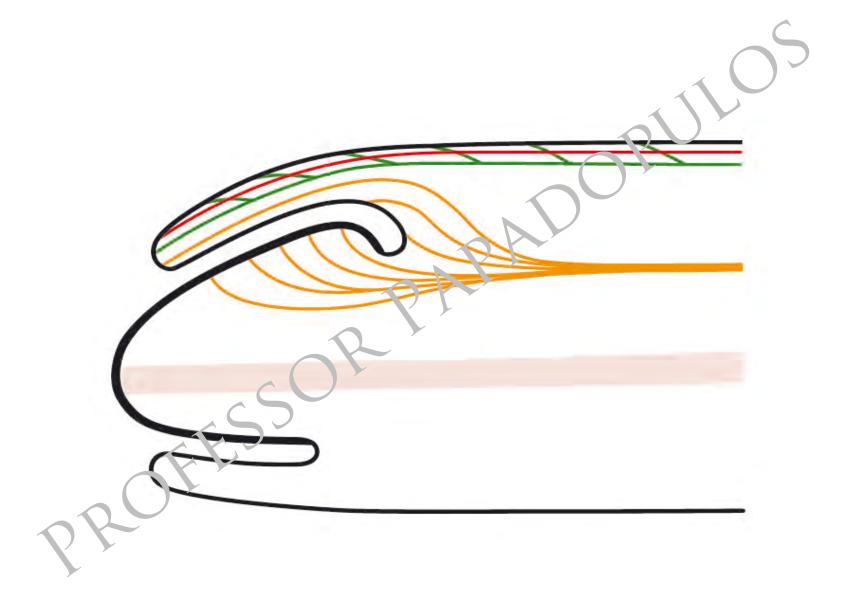
N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.



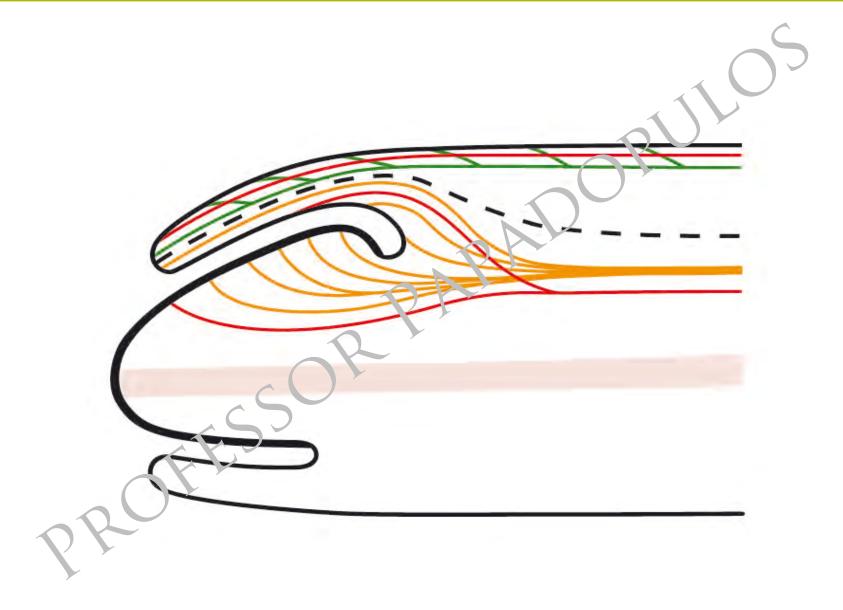
N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.



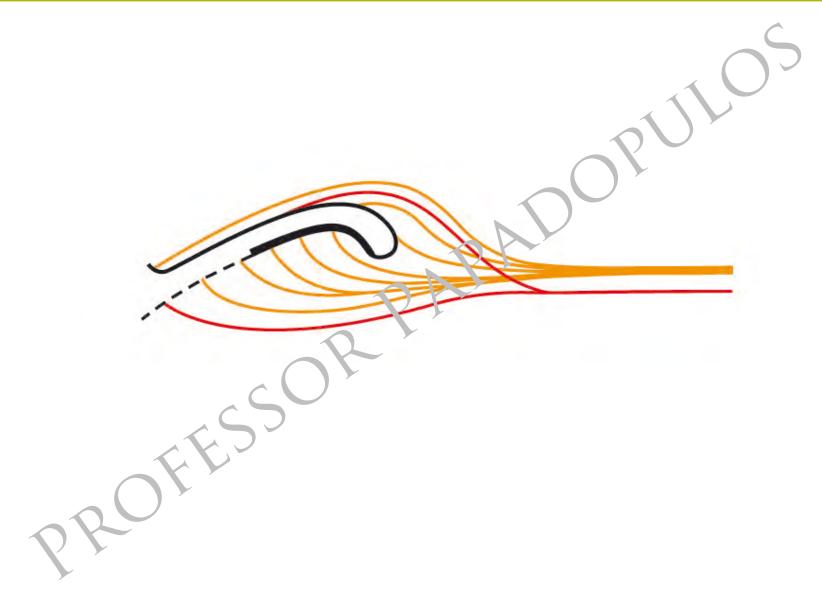
N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.



N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.

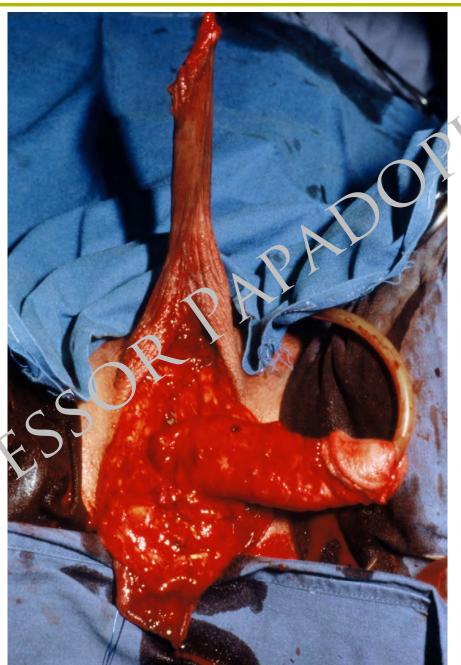


N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.



N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.





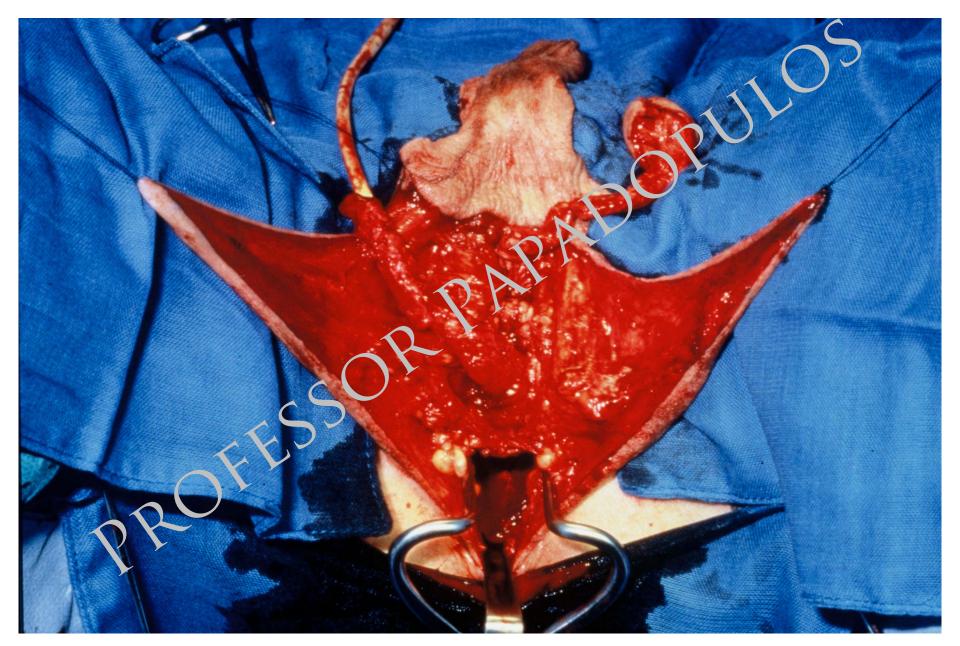


















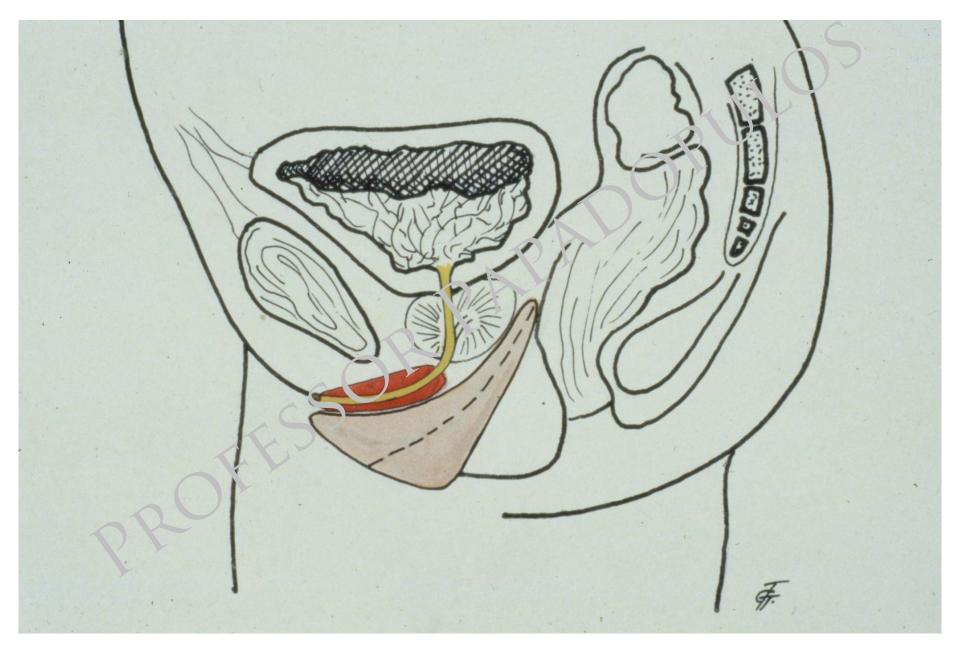




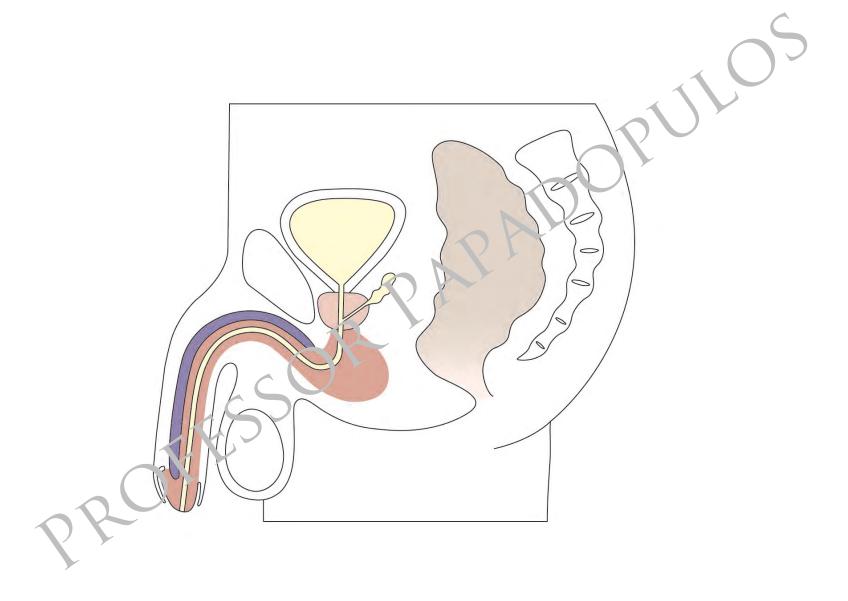


The Neo-Vagina





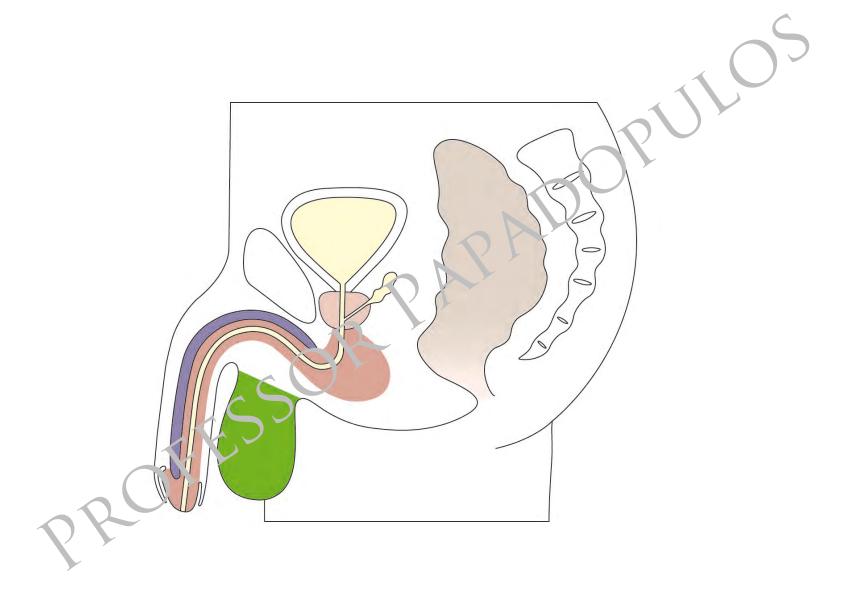




N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.

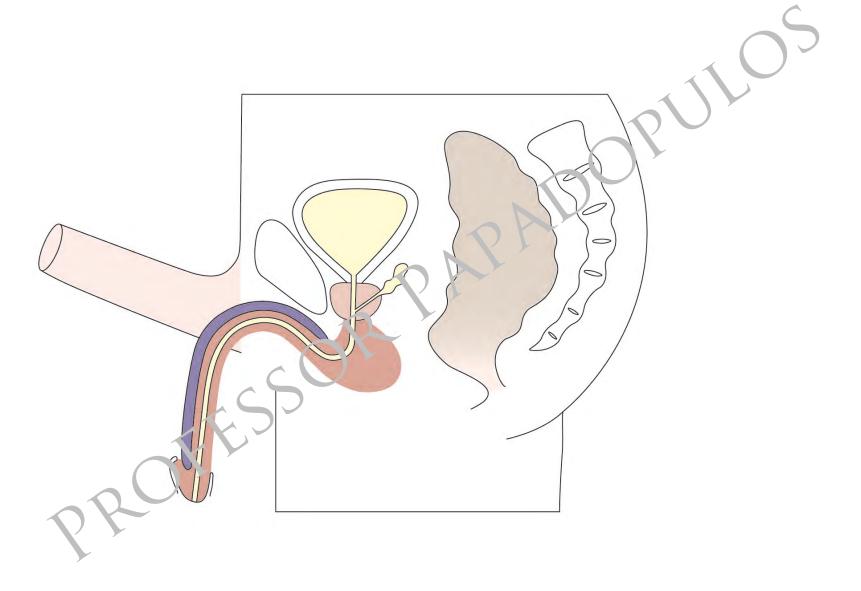






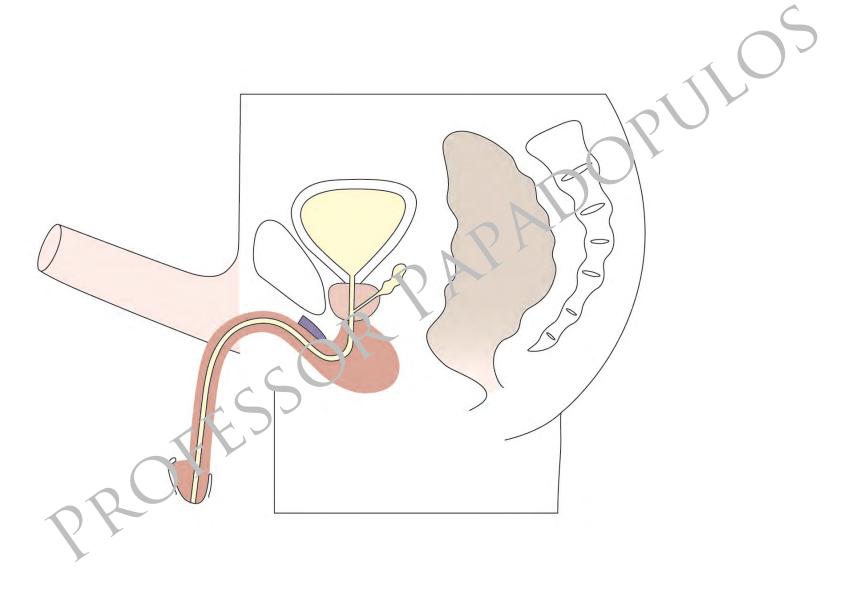
N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.





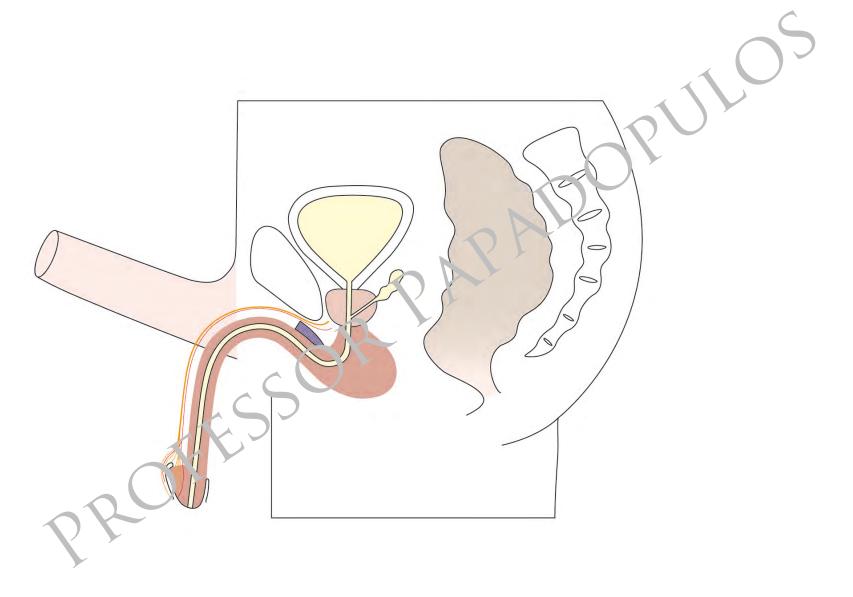
N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.





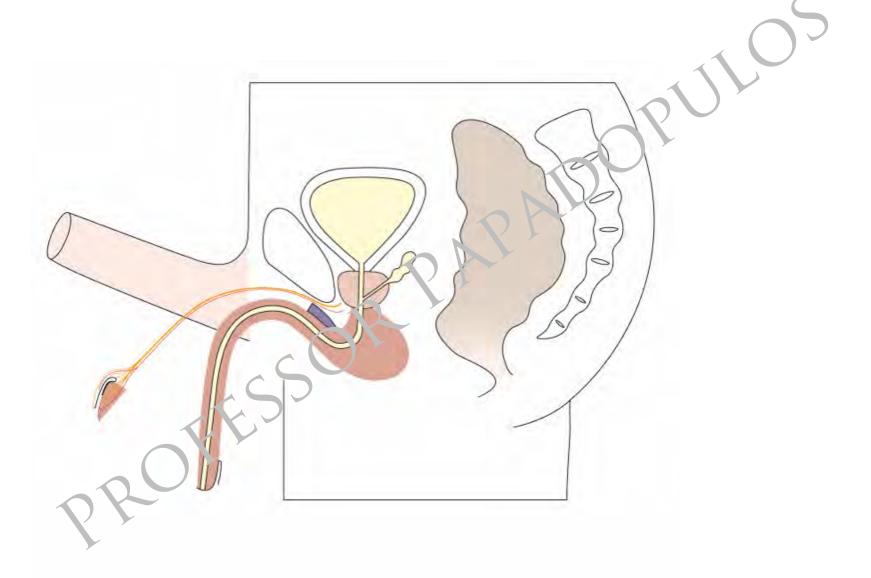
N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.





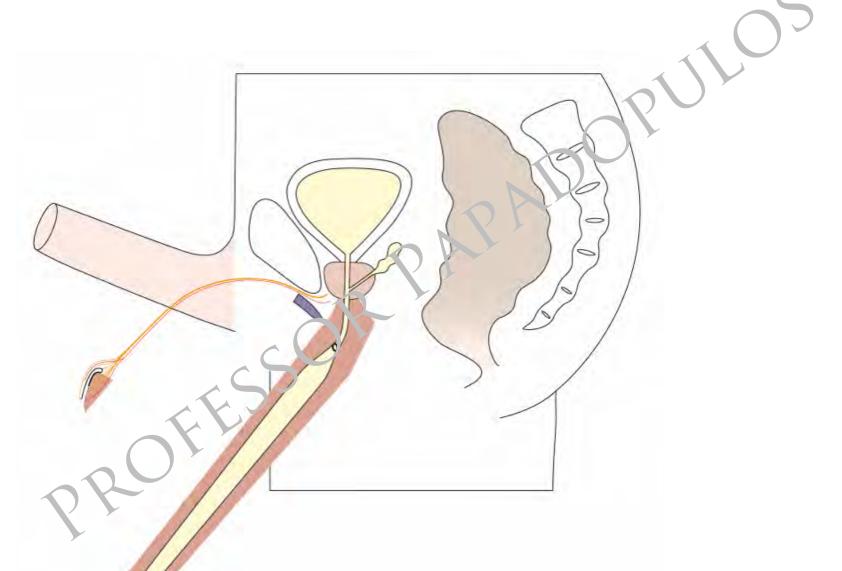
N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.





N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.

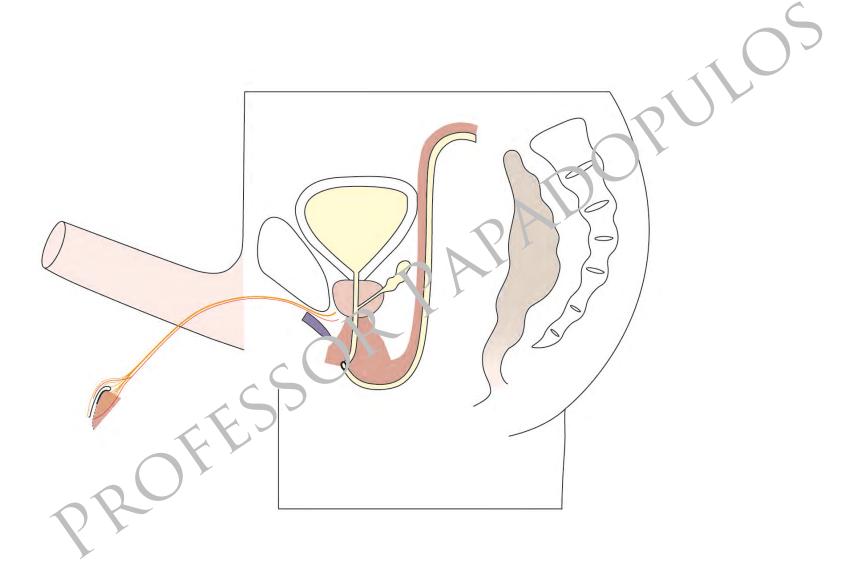




N.A. Papadopulos, D Zay in, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.

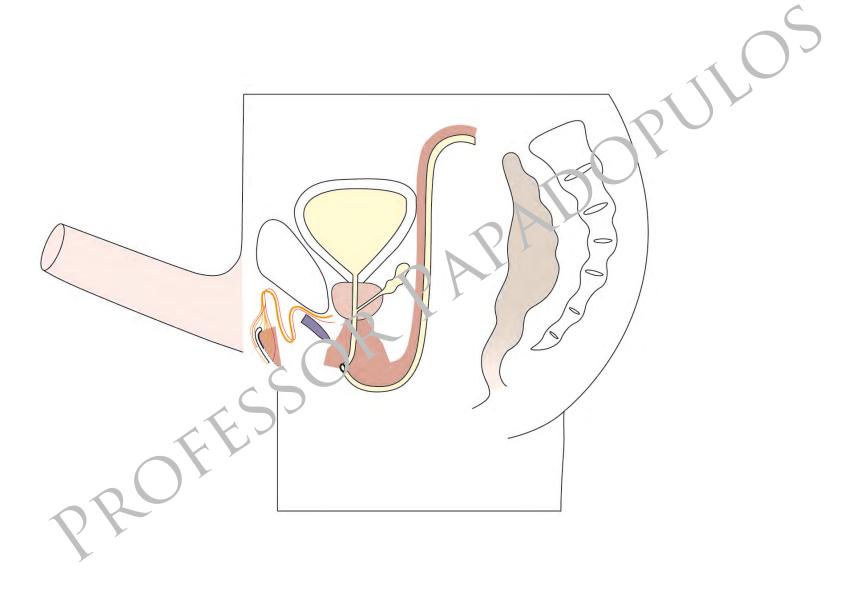






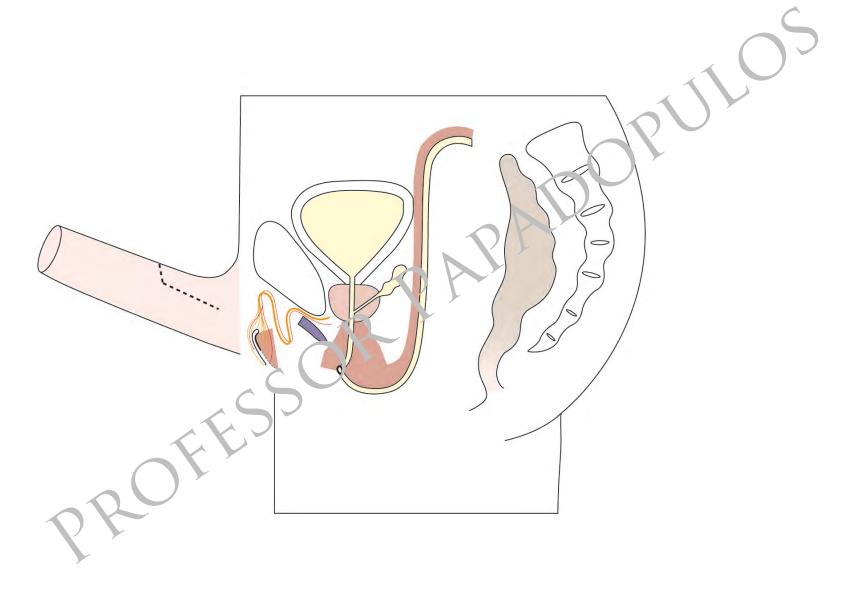
N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.





N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.

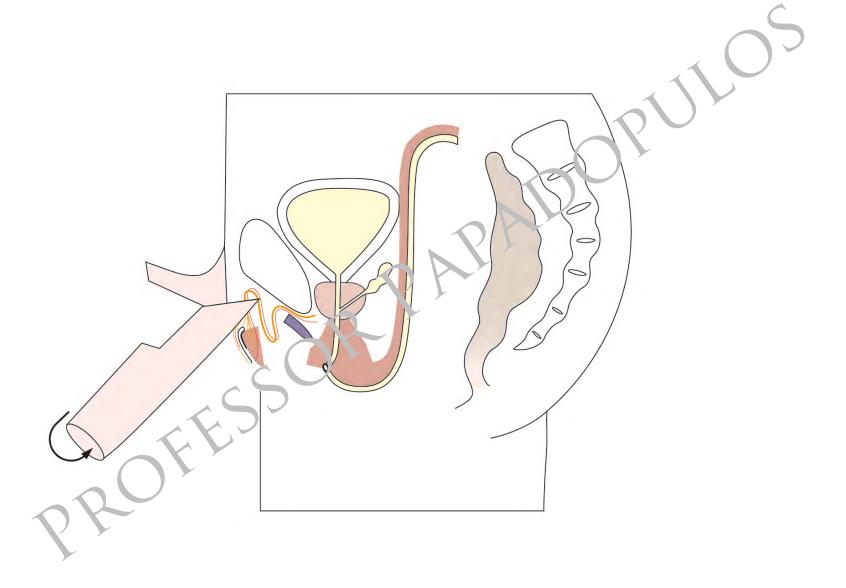




N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.







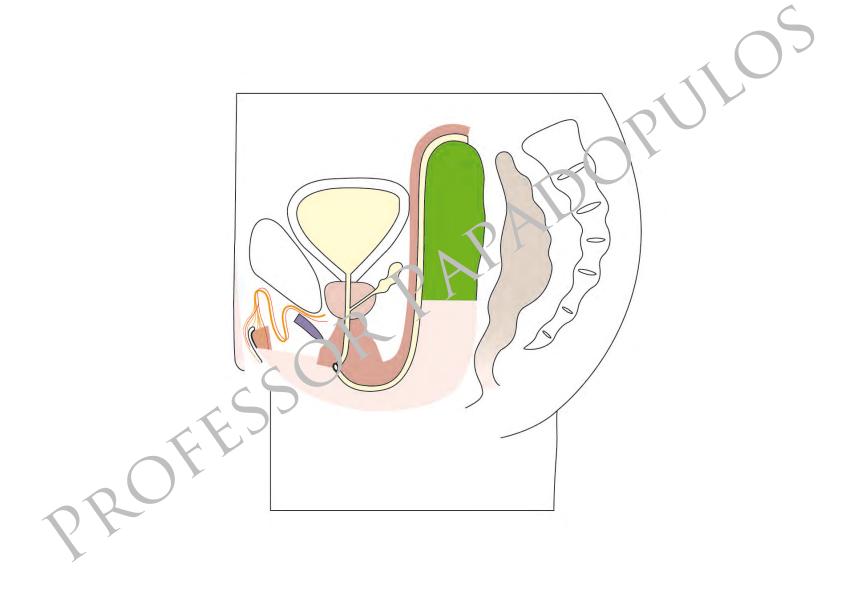
N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.





N.A. Papadopulos, D Zavlin, J-D Lelle, P Herschbach, G Henrich, H-G Machens, J Schaff. Male-to-Female Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.

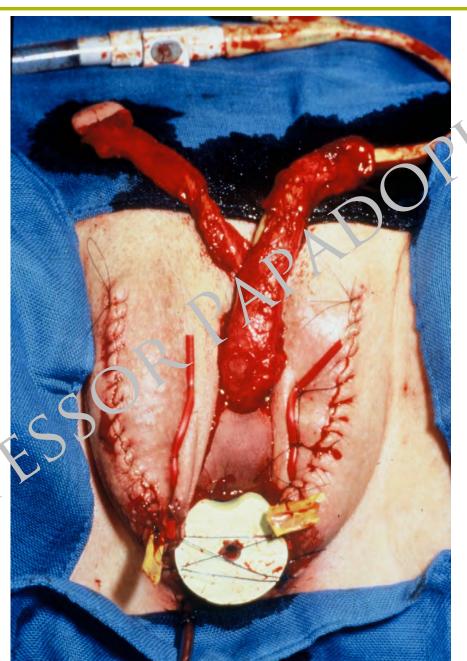






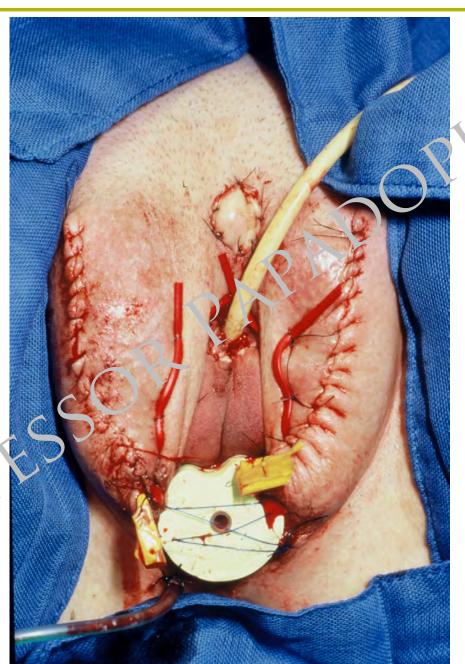














D. Zavlin, ...N. A. Papadopulos. Male-to-Female Sex Reassignment Surgery using the Combined Vaginoplasty Technique: Satisfaction of Transgender Patients with Aesthetic, Functional, and Sexual Outcomes. Aesth Plast Surg, 2018; 42:178-87

)





D. Zavlin, ...N. A. Papadopulos. Male-to-Female Sex Reassignment Surgery using the Combined Vaginoplasty Technique: Satisfaction of Transgender Patients with Aesthetic, Functional, and Sexual Outcomes. Aesth Plast Surg, 2018; 42:178-87

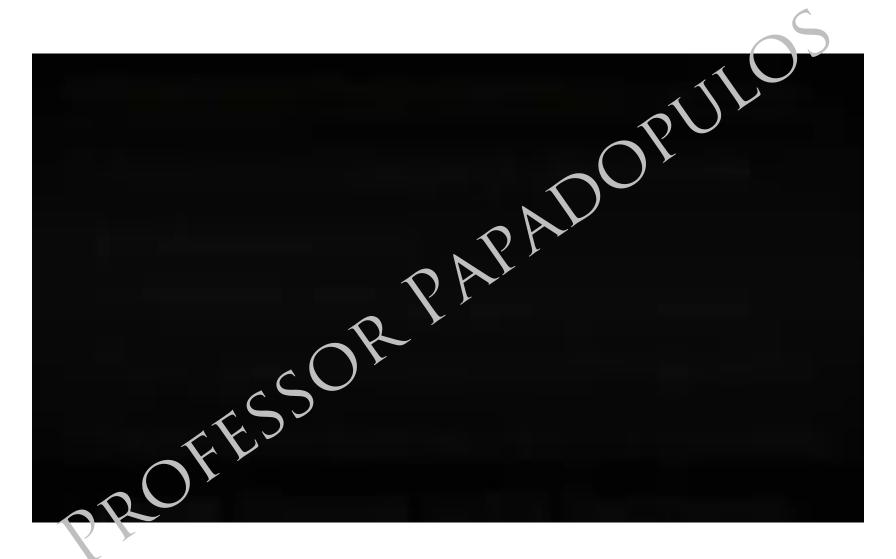
)





D. Zavlin, ...N. A. Papadopulos. Male-to-Female Sex Reassignment Surgery using the Combined Vaginoplasty Technique: Satisfaction of Transgender Patients with Aesthetic, Functional, and Sexual Outcomes. Aesth Plast Surg, 2018; 42:178-87













PRO



ΕΙΡΗΝΟΔΙΚΕΙΟ ΑΘΗΝΩΝ



Αριθμός Απόφασης

ΤΟ ΕΙΡΗΝΟΔΙΚΕΙΟ ΑΘΗΝΩΝ

Συγκροτήθηκε από την Ειρηνοδίκη
την οποία όρισε η Πρόεδρος του Τριμελούς Συμβουλ υ
Διοικήσεως του Ειρηνοδικείου Αθηνών και από τη Γραμματέα

Συνεδρίασε δημόσια στο ακροατήριό του στην Αθήνα στις. για να δικάσει την τταρακάτω υπόθεση μεταξύ:

Του αιτούντος κατοίκου Αθηνών, οδός* πληρεξουσίας δικηγόρου του

Ο απών ζητεί να ήνει δεκτ. η πτό απόσι του εκούσιας διαδικασίας, που στέθη, ε στη ι ραμματεία αυτού του Δικαστηρίου με αριθμό κατάθες ης και προσδιορίστηκε για την ανωτέρω δικάσιμο

Κα. τη συζήτηση της υπόθεσης η πληρεξούσια δικηγόρος του τούντος ανέπτυξε τους ισχυρισμούς της και ζήτησε να γίνουν δεκτά όσα αν. Σρονται στα πρακτικά και στις προτάσεις της.

ΜΕΛΕΤΉΣΕ ΤΗ ΔΙΚΟΓΡΑΦΙΑ

"θήλυ" αντί του αναγραγέντος ο η λι, ξιαρχική πράξη "άρρεν", το δε κύριο όνομα αυτού τντί του αναγραφέντος στη ληξιαρχική πράξη αντί του αναγραφέντος στη ληξιαρχική πράξη

Κρίξηκε, αποφασίστηκε και δημοσιεύτηκε σε έκτακτη, δημόσια συν. Νοίαση στο ακροατήριό του.



Breast augmentation

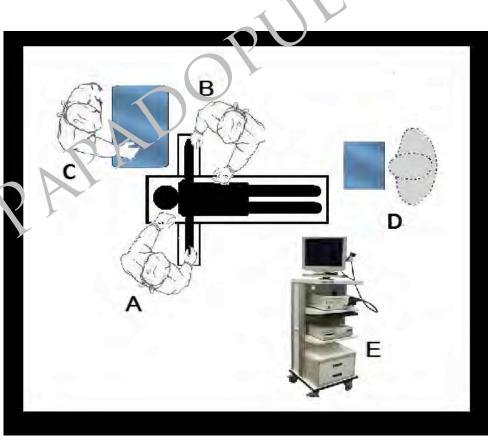










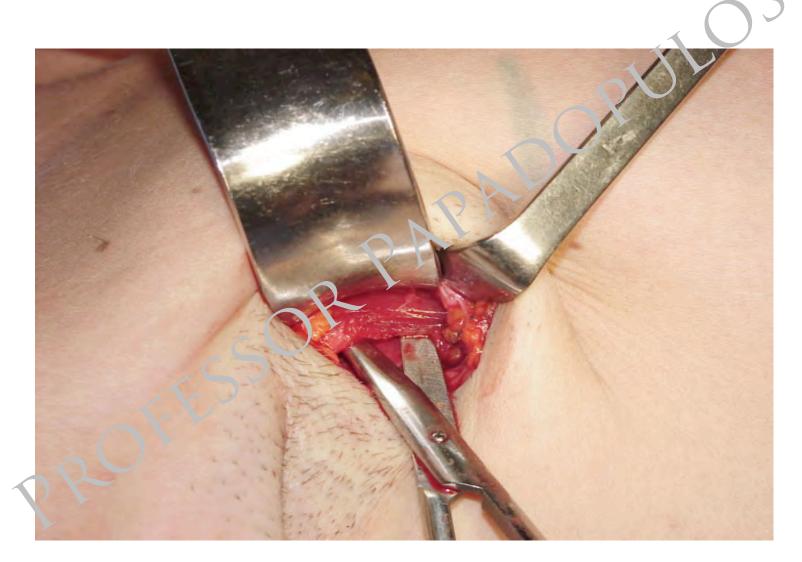


NA Papadopulos, A Totis, D Kiriakidis, M Mavroudis, G Henrich, O Papadopoulos, P Herschbach, H-G Machens, E Biemer. Quality of life, personality changes, self esteem, and emotional stability after breast augmentation. *Eur J Plast Surg*, 2014;37:479-88









NA Papadopulos, A Totis, D Kiriakidis, M Mavroudis, G Henrich, O Papadopoulos, P Herschbach, H-G Machens, E Biemer. Quality of life, personality changes, self esteem, and emotional stability after breast augmentation. *Eur J Plast Surg, 2014;37:479-88*





NA Papadopulos, A Totis, D Kiriakidis, M Mavroudis, G Henrich, O Papadopoulos, P Herschbach, H-G Machens, E Biemer. Quality of life, personality changes, self esteem, and emotional stability after breast augmentation. *Eur J Plast Surg*, 2014;37:479-88











NA Papadopulos, A Totis, D Kiriakidis, M Mavroudis, G Henrich, O Papadopoulos, P Herschbach, H-G Machens, E Biemer. Quality of life, personality changes, self esteem, and emotional stability after breast augmentation. *Eur J Plast Surg*, 2014;37:479-88



Lebenszufriedenheit transsexueller Patienten nach geschlechtsangleichenden Operationen

(Quality of Life by Transsexual Patients after Sex Reassignment Surgery)

A. Zimmermann, R. Zimmer, L. Kovacs, S. Einödshofer, P. Herschbach, G. Henrich, W. Tunner, E. Biemer, N.A. Papadopulos

Der Chirurg, 2006;77:432-38



Results

very high identification with the new sex and satisfaction with their bodies

further improvement
through the optimization of surgical techniques and
the improvement of postoperative professional
and social integration can be achieved





Conclusion

Because of these reasons in the future these insightful findings should be tried to be verified as part of follow-up studies, Including however a non-operated control group



Quality of Life after Male-to-Female Sex Reassignment Surgery: a Prospective Study

N. A. Papadopulos, D. Zavlin, J.-D. Lelle,

P. Herschbach, L. Kovacs, J. Schaff



Methods

49 patients contacted from Oct 2012 to Jan 2014

47 patients participated in the study

37 patients (79%) have currently filled out 10 and T1

Patients received packages of question aires on two different occasions.

T0: pre-operatively

T1: roughly 6 months after the last surgery

Inclusion criteria

 All MTF transsexuals as in-patients for their first sex reassignment surgery

Exclusion criteria:

- Previously operated genitals
- Missing consent to enter study





Self-developed indication-specific questionnaire

Time between questionings: 11.2 months

Age: 38.9y [19 - 66]

Weight: 78.0kg

Size: 1.79m

Regular intercourse:

- pre-op 6 (16.2%)
- post-op 20 (54.1%)

Total **satisfaction** post-op:

- aesthetically 8.4 (out of 10)
- functionally 8.3 (out of 10)

Patients felt post-operatively significantly much more feminine (p = 0.000)

32 patients (86.5%) with two surgeries or more, including

16 patients (43.2%) with breast augmentations

36 patients (97.3%) did not regret the surgery/ies at any given moment



Results: FLZ-M, General

Item	pre-op	post-op	t-test (p =)
Friends / Acquaintances	8.97	10.11	0.296
Spare Time / Hobbies	4.16	7.24	0.012
Health	8.70	11.54	0.017
Income / Financial Safety	2.37	3.46	0.662
Occupation / Work	4.41	5.43	0.496
Living situation	8.16	8.70	0.691
Family / Children	4.84	7.54	0.065
Partner / Sexuality	-1.78	5.83	0.000

Min -12, Max 20



Results: FLZ-M, Health

Item	pre-op	pcst op	t-test (p =)
Physical Performance	5.27	6.95	0.106
Ability to Relax	4.70	9.32	0.000
Energy / Joy of Life	5.81	10.46	0.001
Mobility	11.00	13.57	0.025
Vision / Hearing	10.16	10.84	0.495
Free of Fear	4.22	7.78	0.006
Free of Pain	7.97	9.59	0.231
Independent of Help / Nursing	12.92	12.86	0.966

Min -12, Max 20



Results: FLZ-M, Appearance (body image)

Min 12, Max 20

to sento i == iii, i ippositsi to (is self iii sego)			7111 12, Max 20
Item	pre-op	post-op	ι-test (p =)
Hair	5.46	9.08	0.001
Ears	6.92	9.32	0.016
Eyes	9.57	10.81	0.300
Nose	5.57	7.16	0.082
Mouth	7.03	9.14	0.044
Teeth	6.38	7.32	0.348
Facial Hair	-0.68	3.49	0.014
Chin/Neck	4.76	6.62	0.063
Shoulders	3.62	5.43	0.045
Breast/Bosom	-0.46	9.08	0.000
Abdomen	0.05	3.22	0.012
Waist	3.65	4.59	0.514
Hips	5.16	6.22	0.416
Penis/Vagina	-10.08	14.81	0.000
Bottom	5.81	7.11	0.283
Thighs	4.76	6.54	0.149
Feet	5.00	5.89	0.373
Hands	5.30	6.95	0.074
Skir	5.78	8.38	0.076
Body Hair	1.59	4.08	0.130
Size	5.78	6.35	0.622
Weight	4.05	3.92	0.919

Results: FPI-R

- pre-op 6.49 → 4.81 ↓ post-op highly significant improvement (p = 0.003)
- 6.20 mean of German norm population surveying 2035 participants*
 significant difference to norm only post-op (p = 0.020)

Min 0, Max 14

The post-coerative value is a sign of high emotional stability and self-assessment (4 - 6)



Results: RES

- pre-op 32.9 → 35.0 ↑ post-op highly significant improvement (p = 0.004)
- 33.5 mean of German norm population surveying 4988 participants*
 no signifincant differences of our patients to norm

Min 10, Max 40

Both values sign for high self-esteem (>30).





Results: PHQ-4

- pre-op 3.86 → 1.73 ↓ post-op highly significant improvement (p = 0.000)
- 1.76 mean of German norm population surveying
 n = 5003 participants (Loews et al. 2010)
- Post-op no difference to norm, only pre-op (p = 0.003)

Min 0, Max 12

0 to 2 normal,

3 to 5 mild

6 to 8 medium,

9 to 12 severe depression

Conclusion

Correlation between the high scores in our self-developed indication-specific questionnaire and the results in the four standardized and validated questionnaires.

The male-to-female sex reassignment surgery using the combined method leads to significantly:

- higher quality of life
- higher emotional stability
- higher self-esteem
- Lower depressiveness



Literature

- N.A. Papadopulos, J. Schaff, E. Biemer. Usefulness of free sensate osteofasciocutaneous forearm and 1) fibula flaps for neophallus construction. J Reconstr Microsurg, 2001;17:407-12.
- N.A. Papadopulos, J. Schaff, E. Biemer. Long-term fate of the bony component in neophallus construction 2) with free osteofasciocutaneous forearm or fibula flap in 18 female-to-male transsexuals. PRS, 2002;109(3): 1025-1030, Discussion 1031-1032.
- N.A. Papadopulos, et. al.. The donor-site morbidity following harvesting of free osteofascio-cutaneous 3) fibula flaps with extended skin island. Ann Plast Surg. 2002;49:138-44.
- 4) A. Zimmermann, et. al.. Lebenszufriedenheit transsexueller Patienten nach geschlechtsangleichenden Operationen. Der Chirurg, 2006;77:432-6
- N.A. Papadopuloset. al.. Quality of life following Aesthetic Plastic Surgery: A prospective study. JPRAS, 5) 2007;60:915-21.
- N.A. Papadopulos, J. Schaff, E. Biemer. The use of free prelaminated and sensate osteofasciocutaneous 6) fibula flap in phalloplasty Injury, 2008:39:62-7.
- 7) J. Schaff, N.A. Papacopulos. A new protocol for complete phalloplasty with free sensate and prelaminated osteofasciocutaneous fibula flaps: Experience in 37 patients. Microsurg, 2009;29:413-9.
- 8) N. Papadopulos, J. Schaff. Guest co-editors of the special issue: "Angleichungsoperationen bei Transsexualismus (Sex Reassignment Surgery by transsexuals)". HaMiPla, 2011;43:207.
- S. Morath, N. Papadopulos, J. Schaff. Operatives Management und Techniken der Mastektomie bei Frau-9) zu- Mann Transsexuellen. HaMiPla, 2011;43:232-239.





Literature

- 10) H. Pototschnig, et. al.. The free osteofasciocutaneous fibula flap: Clinical applications and surgical considerations. Injury, 2013;44:366-9.
- 11) N.A. Papadopulos, et. al.. Quality of life, personality changes, self esteem, and emotional stability after breast augmentation. Eur J Plast Surg, 2014;37(9):479-88
- 12) N.A. Papadopulos, et al.. Quality of Life and Patient Satisfaction Following Male-to-Female Sex Reassignment. J Sex Med, 2017;14(5):721-30.
- 13) N.A. Papadopulos, et. al.. Surgical Outcome and Patient Satisfaction after Male-to-Female Sex Reassignment Surgery Using the Combined Vaginoplasty Technique in a Prospective Study. JPRAS, 2017;70(10): 1483-92.
- 14) N.A. Papadopulos, et. al.. Male-to-Fernal Sex Reassignment Surgery Using the Combined Technique Leads to Increased Quality of Life in a Prospective Study. PRS, 2017;140(2):286-4.
- 15) R. Niehaus, et. al.. Quality of life changes after Rhinoplasty. Facial Plast Surg, 2017;33(5):530-36.
- 16) N.A. Papadopulos and D. Zavlin. Reply: Terminology in Transgender Patient Care. PRS, 2018;141(2): 318e-319e.
- 17) D. Zavlin, et. al.. Male-to-Female Sex Reassignment Surgery using the Combined Vaginoplasty Technique: Satisfaction of Transgender Patients with Aesthetic, Functional, and Sexual Outcomes. Aesth Plast Surg, 2018; 42:178-87