TUNICA ALBUGINEA CRURAL GRAFT FOR SEVERE PENILE CURVATURE (TACRUG) DUE TO PEYRONIE'S DISEASE: 10 YEARS FOLLOW-UP

Teloken C., Dal’Asta I., Coelho L., Graziottin T.
Surgery management of severe penile deformity due to Peyronie’s disease is challenging.
Incision and grafting

1. Fascia (temporalis, rectus abdominal)
2. Pericardium
3. Dermal (graft or flap)
4. Buccal mucosa
5. SIS (porcine small intestinal submucosa)
6. Saphenous vein
7. Cadaveric fascia lata
8. Fascia lata
9. Tunica vaginalis
10. Tunica albuginea crural graft (TACRUG)

(We first described (Teloken et al. JUrol 164(1):107-8, 2000.)
suboptimal long-term results

- curvature recurrence
- erectile dysfunction
- infection
- abnormal scars
- penile: numbness, shortness
Ideal graft

- Autologous
- Patients’s tunica albuginea
- Same tissue, same physical characteristics (tensile strength, compliance and flexibility)
- No antigenicity or infection transmission risk
- Minimal tissue inflammation
- Not imposing additional costs, such is the case for synthetic and processed organic compounds
Candidates for surgery

1. severe penile curvature, narrowing, or indentation
2. deformity precluding coitus
3. severe penile shortening
4. preserved erectile function
5. ED responding to PDE5 inhibitors
Patients

- chart reviewed
- preserved erectile function or ED responding to PDE-5 inhibitors
- stable penile deformity precluding vaginal intercourse.
Methods:

- Penile degloving
- Plaque incision
- Measurement of the defect
- TACRUG is obtained through a 3-cm longitudinal perineal incision.
- A longitudinal segment of proximal corpus cavernosum 2mm larger than the defect is delimited with methylene blue.
- preserving the cavernous artery entry point
- segment of tunica from the contralateral corpus cavernosum may also be retrieved if necessary.
- The corpus caversonum then is closed with running 4-0 polyglactin suture.
- Graft is tailored according to the gap to be occluded.
- plaque incision
- straight penis
- “gap” measurement
unilateral corpus cavernosum

scrotum
Preserving Corpus cavernosum muscle

Graft being withdrawn

Picture 12
Neurovascular band before covering graft

graft
TACRUG - RESULTS
mean age 54 yo (42 – 75)

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<td>P. numbness</td>
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(*) Willing to undergo again
# TACRUG - RESULTS

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TACRUG CONCLUSION

- graft easily obtained
- does not carry the risk of rejection or transmission of infectious diseases
- does not add costs
- affords satisfactory long-term results.
- overall complications rate (curvature recurrence, ED, sensibility
- No jeopardize those who require penile implant
- postoperative result as excellent or satisfactory 81.7%