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MP67-20 Multicentre prospective study of patients with Peyronie's disease

(PD) who underwent incision or partial-plaque excision with collagen- \*Lyx Institute of Urology

fibrinogen-thrombin fleece grafting

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### INTRODUCTION

- Surgical treatment represents the gold standard for patients with clinically significant PD.
- Multiple surgical techniques have been proposed.
- 2011: the technique of grafting with haemostatic self-adhesive fleece of equine collagen was described (single surgeon, single institution)<sup>1</sup>.
- Potential advantages such as shorter surgery duration, less technically demanding procedure and relatively cheaper than other graft materials previously described.
- 2013: Expanded experience by Hatzichristodoulou<sup>2</sup>.
- 2016-2017: popularized used in Europe. All of them: single surgeon, single institution

## OBJECTIVES

 To evaluate the preliminary outcomes in patients who underwent this surgical technique in 11 Spanish centres after 16 months of recruiting.

# METHODS

- July 2016 October 2017
- 43 patients
- Standardized technique: incision / excision + TachoSil® grafting
- Inclusion criteria:
  - o Patients with Peyronie's disease with more than 45° of curvature with good prior erectile function (IIEF-5> 22 points), or with hour-glass or hinge deformities, with/without shortened penis.
- Exclusion criteria:
- o Previous operation in penis affecting corpora cavernosa.
- 11 Spanish specialized centres.
- Prospective data: demographics, preoperative, perioperative, post-surgical.
- Main outcomes of the study: PDQ, IIEF-5, EHS, satisfaction questionnaire.
- Follow-up at 3 and 6 months.
- All patients provided informed consent and the protocol was approved by Institution Review Board.

# RESULTS

BASELINE DATA			
Age (mean)	53.8 y.o. (SD 5.9)		
Plaque size (median)	17.1 mm. (SD 11,36)		
Curvature (mean)	71.8° (SD 16.88)		
Localization	81,5% dorsal; 10,5% ventral; 7,9% lateral		
Previous treatments	65,1% (PDE5i, vit. E, pentoxyfilline, traction therapy)		
PERI-OPERATIVE DATA			
Surgery duration (mean)	91,3 min. (SD 22,62)		
Technique used	34/43 incision; 6 partial excision; 3 complete excision		
Intrasurgical complete resolution (<5°)	93% -> 1 patient co-adyuvant plication		
Postoperative hematoma	7/43 (16,3%) -> conservative management		
Vascular complications	0/43		

Mean follow-up time was 9.4 months (SD 4.6)

MAIN OUTCOMES					
	BASELINE	3 MONTHS	6 MONTHS	p	
EHS (mean)	3,5	3,3	3,2	0,057	
IIEF-5 (mean)	20.7	19,6	19,5	0,224	
PDQ (mean)	31,1	13,6	10,8	<0,001	
PDQ-SB (mean)	10,5	3,4	3,6	<0,001	

#### SATISFACTION QUESTIONNAIRE

- 83.7% (36/43) of the patients considered that their penis was totally or practically straight at 6 months.
- 65.1% complained of shortening of between 1-3 cm after the intervention.
- 55% of the patients complained of some glans hyposensitivity at 6 months after the intervention.
- 95.3% of the patients reported a clear improvement after the intervention.
- 79% would choose again the same intervention. If we select the patients operated without excision: 94.1% would choose again the same technique.
- Only three patients needed to be re-operated: 2 of them had been operated by complete plaque excision (p= 0.004).

# REFERENCES

- 1.Horstmann M, Kwol M, Amend B, Hennenlotter J, Stenzl A. A self-reported long-term follow-up of patients operated with either shortening techniques or a TachoSil grafting procedure. *Asian J Androl*. 2011;13(2):326-331. doi:10.1038/aja.2010.157.
- 2. Hatzichristodoulou G, Gschwend JE, Lahme S. Surgical therapy of Peyronie's disease by partial plaque excision and grafting with collagen fleece: feasibility study of a new technique. Int J Impot Res. 2013;25(5):183-187. doi:10.1038/ijir.2013.7

## CONCLUSIONS

- The technique of incision/excision of plaque plus collagen-fibrinogen-thrombin fleece graft seems to be safe and effective with good aesthetic and functional results
- It should be considered as an option in the therapeutic arsenal of the management of PD.
- To extend this initial experience, the study will continue to collect data from more patients.