

# OBJECTIVE OUTCOME AFTER VAGINAL MESH WITH 6 POINT FIXATION AT 1 YEAR FOLLOW-UP

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## INTRODUCTION

Pelvic organ prolapse (POP) is a major burden for the public health system affecting up to 20% of all women during their life (Walker and Gunasekera, 2011). There is heated debate about vaginal mesh surgery with companies withdrawing their kits from the market and whole countries banning vaginal meshes. Quite recently an ultra lightweight mesh kit has been introduced into POP surgery that can be fixated with 6 arms.

## AIM

The aim of this study was to describe the safety and anatomical results of a surgical approach with a single-incision 6 point fixation vaginal mesh for the treatment of pelvic organ prolapse at one year follow-up.

## METHOD

- prospective observational study
- transvaginal mesh (InGYNious®, AMI Austria) (Fig. 1)
- November 2014 and June 2016
- 6 urogynaecological centres
- Ethical approval by local ethics committees
- stage II prolapse or higher (point Ba or C >-1 according to the international prolapse quantification system)
- structured questionnaire and clinical examination preoperatively / after 1a
- Anatomical success was defined as < 0 (POPQ) for both anterior and apical compartments.

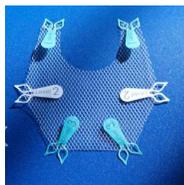


Fig. 1. Ingynious mesh

## RESULTS

248 patients available for the 12 months follow up

**Demographic data** shown in Tab.1

### Intraoperative complications

- 14 (6%) haemorrhage of more than 200ml
- 2 patients intraoperative bladder lesions
- 1 patient urethral lesion

**Anatomical success** 95% for both the anterior and apical compartments

**Mesh erosion rate** 1.6% (n=4)

### Reoperations

- postoperative hematoma (2%)
- mesh revision (0.6%)
- ureteral stent (0.3%)

For prolapse (2.4%, n=6)

**Postoperative dyspareunia rate** 2% (n=5)

Age (years)	70.62 ± 9.56
BMI (kg/m <sup>2</sup> )	26.54 ± 3.98
Smoking	10 (3.9%)
Parity	2 (0 - 8)
Mode of delivery	
Vaginal delivery	2.10 ± 1.24
Caes. section	0.06 ± 0.26
vaginal-operativ	0.07 ± 0.27
Previous surgery	
Hysterectomy	76 (29.9%)
POP surgery	44 (17.3%)
Anti-incontinence procedures	10 (3.9%)
Comorbidities	
Diabetes	13 (5.1%)
Lung disease	5 (2.0%)

Tab 1. Demographic data

POP-Q	Preop.	1a- fu	p- value*
N = 248			
Aa	1.2 ± 1.1	-2.0 ± 0.9	<.001
Ba	1.7 ± 1.6	-2.2 ± 0.9	<.001
C	-0.9 ± 3.6	-5.4 ± 3.2	<.001
Ap	-1.5 ± 1.3	-1.6 ± 1.2	.144
Bp	-1.5 ± 1.5	-1.7 ± 1.2	.205
TVL	8.8 ± 1.5	9.2 ± 1.7	<.001
GH	4.5 ± 1.2	4.2 ± 1.3	<.001

Tab 2. POP- Q measurements of study population before surgery and at one year follow up. Preop, preoperatively; fu, follow-up

Quality of life increased significantly after one year.

Variable	Preop.	1a- fu	p- value
Bladder symptoms			
SUI	83 (33.5%)	71 (28.6%)	.246
UUI	81 (32.7%)	19 (7.7%)	<.001
Voiding dysfunction	100 (40.3%)	3 (1.2%)	<.001
Residual urine (M± SD)	61.6 ± 82.2	21.6 ± 33.2	<.001
Bowel symptoms			
Obstructed defecation	20 (8.1%)	15 (6.0%)	.442
Fecal Incontinence	4 (1.6%)	4 (1.6%)	1.000

Tab 3. Bladder and bowel symptoms before surgery and at one year follow up. Preop, preoperatively; fu, follow-up

34% of the study population had preoperative incontinence; reoperation for postoperative SUI was only performed in 10% of all cases out of 237 patients without primary concomitant incontinence surgery.

## CONCLUSIONS

This is the first study to report on the follow up of the InGYNious mesh and its anatomical and functional outcome. The objective cure rate was high with a concomitant high patient satisfaction rate. Mesh related problems were rare suggesting that this surgical technique can be an option for women requiring prolapse surgery.

## REFERENCES

WALKER, G. J. A. & GUNASEKERA, P. 2011. Pelvic organ prolapse and incontinence in developing countries: review of prevalence and risk factors. International Urogynecology Journal, 22, 127-135.

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## CONTACT INFORMATION

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