

# COMPARATIVE STUDY BETWEEN POSTERIOR MESH RECTOPEXY AND VENTRAL MESH RECTOPEXY FOR TREATMENT OF OBSTRUCTED DEFECATION IN FEMALE PATIENTS WITH PELVIC FLOOR DISORDER

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## Introduction

Obstructed defecation syndrome ODS is a benign condition that is associated with the presence of hard stools, sensation of incomplete evacuation, sensation of obstruction during defecation, and/or the difficulty to defecate without using assisting manual maneuvers. Constipation of obstructed defecation may be due to anatomical or functional causes. ODS involves complex anatomic and functional changes so the plan for treatment involves non surgical and surgical options. All techniques have their advantages and disadvantages. Surgical intervention is done for patients with refractory symptoms of obstructed defecation and not improving with conservative management and it is mainly done to correct anatomical caused for ODS such as rectocele and IRP.

## Aim of the Work

The aim of this work was to compare between posterior mesh rectopexy and ventral mesh rectopexy in the treatment of obstructed defecation in female patients with pelvic floor disease in terms of postoperative outcomes and complications.

## Patients and Methodology

This is a prospective study of 20 female patients with obstructed defecation disease managed at the Alexandria University Hospital. Patients were divided into two groups according to the operation, group A had posterior mesh rectopexy PMR and group B had ventral mesh rectopexy VMR.

Modified ODS score was calculated for all patients preoperatively and postoperatively. Other secondary outcomes and postoperative complications were documented. Group A undergone PMR that is characterized by full mobilization of the rectum and fixation of the mesh posterior to the rectum and into the sacral promontory while group B undergone VMR that is characterized by mobilizing the rectum anteriorly only with limited lateral dissection and the mesh is fixed anteriorly and into the sacral promontory posteriorly.

## Results

Table 1: Comparison between MODS preoperatively & postoperatively

MODS	Group A (PMR) (n = 10)	Group B (VMR) (n = 10)	p
Pre			
Min. – Max.	12.0 – 24.0	15.0 – 24.0	0.582
Mean ± SD.	18.30 ± 4.45	19.20 ± 2.39	
3 months			
Min. – Max.	3.0 – 16.0	5.0 – 17.0	0.168
Mean ± SD.	8.40 ± 4.09	11.0 ± 4.0	
12 months			
Min. – Max.	6.0 – 11.0	4.0 – 17.0	0.596
Mean ± SD.	9.30 ± 1.64	8.40 ± 4.95	
F (p <sub>0</sub> )	69.221* (<0.001*)	41.484* (<0.001*)	
p <sub>1</sub>	<0.001*	<0.001*	
p <sub>2</sub>	<0.001*	<0.001*	
p <sub>3</sub>	1.000	0.095	

p: p value for comparing between the two studied groups  
p0: p value for comparing between the three studied periods  
p1: p value for comparing between Pre and 3 months  
p2: p value for comparing between Pre and 12 months  
p3: p value for comparing between 3 months and 12 months

Table 2: patients characteristics

	Group A (PMR) (n = 10)	Group B (VMR) (n = 10)	P
Age (years)			
Min. – Max.	33.0 – 61.0	32.0 – 56.0	0.864
Mean ± SD.	42.20 ± 9.15	42.90 ± 8.81	
BMI (kg/m <sup>2</sup> )			
Min. – Max.	20.0 – 28.0	19.0 – 30.0	0.312
Mean ± SD.	23.80 ± 2.74	25.20 ± 3.26	
Deliveries			
Min. – Max.	2.0 – 5.0	2.0 – 5.0	0.552
Mean ± SD.	3.30 ± 1.16	3.0 ± 1.05	

## Conclusion

- Obstructed defecation is a complex and multifactorial problem, it is a combination of functional and anatomical factors. In our study, patients were operated for treating the anatomical abnormalities resulting in ODS which are rectoceles and / or internal intussusception.
- In this study, both posterior mesh rectopexy and ventral mesh rectopexy successfully improved the ODS score on 3 months and 12 months follow up.
- Further studies with larger sample size, longer follow-up and comparative studies are still required to decide the best treatment modality for ODS mainly due to anatomical abnormality.