

## Our 6-years-experience in an open underlay mesh repair for primary ventral hernia

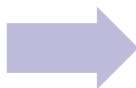


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### Aim

Analyze the outcomes of the open underlay mesh placement (OUMP) with prosthetic hernia patch in the intraperitoneal (IP) or preperitoneal (PP) space



**Primary outcome:**  
 - Hernia recurrence.  
**Secondary outcomes:**  
 - Identifying risk factors  
 - Comparison of different surgical techniques in the UOMP group

### Material & Methods

A retrospective study from the year 2017 to 2022



Comparison of recurrence and no recurrence group;  
 Multivariate analysis in the OUMP subgroup



### Results

**538 patients**  
**Types of hernias:**  
 Umbilicals (87.5%)  
 Epigastrics (12.5%)

**564 hernias:**  
 - OUMP: 90.6%  
 - Onlay mesh 1.2%  
 - No mesh: 3.2%

**Global recurrence rate: 4.6%**  
**Recurrence rate at OUMP group: 4.1%**

#### Significant difference between Recurrence (N = 26) and No recurrence group (N = 538):

Smoking	44 vs 24.5 %	(p=0.03)
BMI >35	26.9 vs 11.1 %	(p=0.04)
Neoplasia	3.8 vs 0.4 %	(p=0.02)
Rectus diastasis	40 vs 9.3 %	(p<0.001)
Epigastric hernia	23.7 vs 10.9 %	(p=0.01)
Operating time, minutes (SD)	28 ± 8.1 vs 24.2 ± 7.3	(p=0.04)
Epigastric & umbilical hernia repair	15.4 vs 4.3 %	(p=0.01)
Wound infection	15.4 vs 1.9 %	(p<0.001)
Seroma	26.9 vs 10.4 %	(p=0.009)

#### No significant difference between OUMP recurrence (N = 23) vs OUMP no recurrence group (N = 510):

IP mesh placement	50 vs 38.2 %	(p=0.2)
PP mesh placement	40 vs 59.7 %	(p=0.2)
Use of non-absorbable suture	57.1 vs 50.6 %	(p=0.6)
Use of slowly absorbable suture	35.7 vs 45.2 %	(p=0.4)
Defect closure vs mesh fixation to the border of the defect	84.2 vs 82.8 %	(p=0.9)

### Conclusions

An open underlay mesh placement is a safe technique for a primary ventral hernia repair with a low rate of recurrence without any significant difference between several variations in the surgical technique.