

***Innovative single-port approach for simultaneous ventral hernia repair and bariatric surgery: A retrospective case series study***

Dr. Fadhel Alzahrani  
King Abdullah medical City  
Makkah Health cluster  
Saudi Arabia

Rozan A AlHarbi, Tayil A Alharbi, Nedaa Alsulaimani,  
Musaad H Almhadi, Mohammad S Jalaladdin, Bassam  
M Bin Laswad, Abdulqader T Almuallim

# Conflict Of Interest

I have no potential conflict of interest to report

## **Aim**

Was to evaluate our outcome of simultaneous hernia repair during bariatric surgery using single port access

The study includes patients

- Aged 16 to 65,
- With a BMI ranging from 33 to 50,
- HbA1c levels less than 8 for diabetic patients,
- Those opting for sleeve gastrectomy,
- Hernia defects with a transverse diameter of 6 cm or less,
- And an abdominal wall thickness preferably less than 5 cm.

## Abdominal Wall Hernia and Repair Details

		Numbers	percentage
Defects size (Transverse x Longitudinal)cm	1.8 x 1.2 / (7.5 diastasis)	1	16.7%
	11.5 x 6.2	1	16.7%
	2.7 x 4.5 / (6.8 diastasis)	1	16.7%
	5.2 x 3.7	1	16.7%
	Clinically Evident Hernia, NO CT	2	33.3%
Type of mesh	Dual face mesh	3	50.0%
	No mesh	1	16.7%
	prolene mesh	2	33.3%
mesh position	intraperitoneal	3	50.0%
	Onlay	1	16.7%
	Primary closure by absorbable suture	1	16.7%
	Sublay / retromuscular	1	16.7%

## Hospital Stay and Postoperative Outcomes

Table (2)

		Numbers	percentage
Length of hospital stay	2 days	3	50.0%
	3 days	1	16.7%
	4 days	2	33.3%
Narcotics use duration Hrs	24 hours	6	100%
Narcotics dose 4mg IV q6hr (4 times)	2 times	3	50.0%
	3 times.	3	50.0%
30 days readmission	No.	5	83.3%
	Yes	1	16.7%

## Follow-up Duration

Total follow up duration "month"	
Min Max	9 - 13
mean $\pm$ SD	13 $\pm$ 3.29
Median (IQR)	12.5 (14.75 – 11.0)

## Weight loss Analysis

	Min - Max	mean $\pm$ SD	Median (IQR)
Wt before surgery	113.0 – 132.0	120.0 $\pm$ 8.06	119.0 (123.0 – 116.7)
Wt at last follow up	69.0 – 96.0	83.60 $\pm$ 11.3	81.0 (94.0 – 78.0)
Total wt loss (M-N) =	26.0 – 38.0	33.67 $\pm$ 6.66	37.0 (37.5 – 31.5)
Excess weight loss%	21.66 – 37.61	29.60 $\pm$ 5.30	29.86 (31.35 – 27.55)

### Conclusion:

Simultaneous single-port BS and VHR is a feasible and safe approach, providing cosmetic benefits with low complication rates. The innovative single-port laparoscopic technique contributes to favourable outcomes, making it a promising approach for eligible patients. Further research is warranted to establish long-term outcomes and broader application of this evolving procedure.

# Thank you