

Analysis of our 15 years experience performing laparoscopic repair of non midline ventral hernia

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Aim

The laparoscopic intraperitoneal onlay mesh (IPOM) technique for the repair of non-midline ventral hernias (NMVH) is technically difficult and still controversial. This study is an update of our experience in the last 15 years, excluding the first years cases to minimize bias related to the learning curve.

Material & methods

Between 2008 and 2023, 758 patients with ventral hernia underwent surgery using the IPOM technique, among these 125 were NMVH. NMVH data were compared with those of the midline ventral hernias group (MVH).

Results

Age was higher and female gender was predominant in NMVH group. Primary hernia and obstructive symptoms were more frequent and abdominal wall defect area was higher in NMVH group. Median operative time of surgery and the number of ports used were higher in NMVH group. Post-operative complication rate was 19% in the NMVH group and 9% in the MVH group (P = .001). Chronic postoperative pain was 5.6% in the NMVH group and 0.8% in the MVH group (P < .001). Post-operative bulging was 8.8 % in NMVH group and 0.8% in MVH group (P < .001). Recurrence rate was 1.6% in NMVH and 3.8% in MVH group (P < .001).

| | MHV 633 pz | NMVH 125 pz | P-Value |
|-------------------------------------|---------------|----------------|-------------------|
| Complications, n (%) | 58 (9,2) | 24 (19,2) | <u>0,001</u> |
| Specific complication, n (%) | | | |
| Chronic Pain | 5 (0,8) | 7 (5,6) | <u><0,001</u> |
| Bulging | 11 (1,7) | 11 (8,8) | <u><0,001</u> |
| Recurrence, n (%) | 24 (3,8) | 2 (1,6) | <u>< 0,001</u> |



Conclusion

We confirm our good results performing laparoscopic IPOM for non-midline incisional hernias with a recurrence rate lower than the MVH group but with a chronic post-operative pain and a bulging rate statistically significantly higher. However laparoscopic IPOM technique for NMVH require the use of specific technical precautions and a more appropriate perioperative framework.

