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Intraperitoneal onlay mesh for ventral hernia repair: Should the indication be more well defined?

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A recent meta-analysis by Rasador *et al.*^[1] concluded that intraperitoneal onlay mesh (IPOM) repair for ventral hernia is associated with a higher incidence of hematoma, urinary retention, overall early postoperative complications, longer hospital stays, and increased visual analog scale pain scores within 24 h compared to transabdominal preperitoneal repair. A re-do laparoscopies following laparoscopic IPOM found that 42% of patients had omental and 11% had serosal adhesions to the mesh.^[2] This raises serious doubts about the ethical, moral, and scientific reasons for performing the IPOM procedure in ventral hernia repair patients. Seroma seems to occur in 30% of IPOMs.

Probably, there is only one manuscript in recent times highlighting the safety of IPOM repair of small to medium-sized hernias with an extremely low rate of long-term mesh-related complications and strongly recommending discouragement of avoidance of IPOM repairs due to concern for catastrophic complications, but in the end, the authors had a conflict of interest.^[3] On the contrary, inspite of having a longer operative time than IPOM, the extended totally extraperitoneal technique (eTEP) had lower short-term postoperative pain, a shorter postoperative hospital stay with less incidence of postoperative complications.^[4,5]

Though the totally extraperitoneal sublay repair (TES), as compared to IPOM, is associated with an increase in operative time, it provides significant advantages in postoperative quality of life, overall satisfaction to the patient, and cost-effectiveness.^[6] This makes TES a better choice for IPOM.

Most of the meta-analyses have gone against IPOM. The choice of procedure

depends on the patient's specific needs, the hernia's particular characteristics, and the surgeon's expertise and confidence in the procedure.^[7]

Why should the surgeon perform IPOM when it's proven to cause more complications than the alternative procedures in all the meta-analyses? It is reported that ventral hernia repair with IPOM has an incidence of more than 7% bowel adhesion within 5 years, irrespective of the patient's choice or surgeon's expertise.^[8]

In a nutshell, while it is well-established that IPOM is associated with higher rates of postoperative pain, seroma, hematoma, mesh migration, meshoma formation, bowel obstruction, and even recurrence when compared to posterior approaches such as ventral transabdominal preperitoneal, eTEP, or trans abdominal retromuscular repair (TARM), an outright ban on IPOM may not be justified, but IPOM should be repositioned as a bailout procedure, reserved for situations where posterior approaches are not feasible, such as obliterated planes from previous surgeries, or recurrences following TARM or eTEP. IPOM remains a valuable minimally invasive option in complex scenarios, providing safe and effective repair.

Ethical policy and Institutional Review board statement

Not applicable.

Data availability statement

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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Conflicts of interest

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