

EHS202500303 - Incidence of chronic pain after inguinal hernia repair with Partially Absorbable Mesh (PAM)

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Aim

Over the years countless manufactures, materials and shapes have been designed for inguinal hernia repair, to offer the best balance between tissue integration and reduced foreign body reaction and chronic pain.

Hereby we present our experience in the use of a Partially Absorbable Mesh (PAM). The aim of the study is to define the impact of a PAM on postoperative chronic pain and overall quality of life.



Hybridmesh®

After 7-10 months

Material & Methods

Between April 2023 and July 2024, 38 patients affected by monolateral inguinal hernia underwent open inguinal hernia repair with a PAM made of polypropylene (25%) and polylactic acid (75%), with modified Lichtenstein technique.

Postoperative data, including results of the Carolinas comfort scale (CCS), were collected for each patient at 10 and 180 days after surgery.

| | Preoperative | | | | 10 days | | | | 180 days | | | |
|----------------------------|--------------|---------------|---------------|-------------|---------------|-------------|--------------|--------|---------------|--------------|----------|--------|
| | Absent | Soft | Moderate | Severe | Absent | Soft | Moderate | Severe | Absent | Soft | Moderate | Severe |
| Pain | 5 (13.2%) | 12 (31.6%) | 20 (52.6%) | 1 (2.6%) | 12 (31.5%) | 22 (58%) | 4 (10.5%) | 0 | 32 (84.2%) | 6 (15.8%) | 0 | 0 |
| Limitation during movement | 7 (18.4%) | 12 (31.6%) | 17 (44.8%) | 2 (5.2%) | 12 (31.5%) | 22 (58%) | 4 (10.5%) | 0 | 32 (84.2%) | 6 (15.8%) | 0 | 0 |
| Foreign Body Sensation | N.A. | N.A. | N.A. | N.A. | 12 (31.5%) | 22 (58%) | 4 (10.5%) | 0 | 32 (84.2%) | 6 (15.8%) | 0 | 0 |

Results

At 10 days after surgery, 10.5% of patients had moderate pain and limitation, whereas 58% reported light bothersome and 31.5% no discomfort.

A slight alteration in pain and foreign body sensation domains in CCS score were observed in 6 (15.8%) patients at 180 days.

The remaining 32 (84.2%) patients did not complain any discomfort. We had 1 (2.6%) case of hernia recurrence.

Conclusions

In our series, we had 0 cases of significant chronic pain or foreign body perception at 180 days follow-up.

The overall incidence of clinically significant chronic pain, reported by the latest EHS guidelines, ranges from 10 to 12%; with debilitating chronic pain affecting 0.5 to 6% of patients.

PAM with our technique appears to be effective, but prospective trials are needed to confirm these findings.

References

Hybridmesh® is a Partially Assorbable Mesh (PAM) produced by Herniamesh® (Italy)

