INTRODUCTION
Fixation of mesh products is believed to play a role in post-operative pain, a common complication after inguinal hernia repair. Self-gripping meshes may allow for laparoscopic TEP inguinal hernia repair without the need for additional fixation. Long-term outcomes of prospective studies are needed to assess whether these self-gripping meshes lead to effective hernia repair with less post-operative pain, compared to traditional fixation modalities (e.g., tacks, sutures).

PURPOSE OF THE STUDY
The main purpose of the study was to assess post-operative pain and quality of life of patients undergoing total extraperitoneal (TEP) repair of inguinal hernia using ProGrip™ mesh. Secondary objectives include an assessment of feasibility of mesh insertion during TEP repair, intraoperative morbidity and 1-year recurrence rates.

METHODS
- Study is a retrospective analysis of a prospectively collected and maintained database
- Ninety-one inguinal hernias in 62 patients were treated (all by the same operating surgeon) from January 2011 to April 2013 laparoscopically via the TEP technique, using ProGrip™ mesh with no additional fixation
- Test Device: Parietex ProGrip™ self-gripping mesh (Medtronic, New Haven, CT, USA)
- Surgical Technique: A standard three-trocar technique was used, and dissection began at the midline and proceeded laterally. After reduction of the hernia sac, trimmed mesh with rounded corners was folded loosely in thirds and inserted through a trocar into the extraperitoneal space. The medial edge of the mesh was aligned with the midline, and was unfolded from a medial to lateral direction. No additional fixation modalities were used
- Information on patient demographics, hernia characteristics, and comorbidities was collected pre-operatively

RESULTS
- The average operative time was 66 minutes (incision to final dressing), and mesh deployment averaged 193.7 seconds
- Mesh was inserted without incident in all cases, and only one patient exhibited intra-operative morbidity (bradycardia that was responsive to atropine and desufflation)
- Immediate post-operative pain was low (VAS score = 1.1)
- Return to work and full activities was reported at a mean of 4.2 and 1.6 days, respectively
- At the first post-operative visit (mean of 2.5 weeks post-surgery, during which an average of 5.0 narcotic tablets were taken), temporary testis discomfort was reported in five patients
- During the first post-operative visit, 13 seromas were observed; all were asymptomatic and resolved spontaneously
- At the first post-operative visit, three patients had a CCS score >1 (mean CCS score: 0.25; range: 0–1.35)
- At the 1-year post-operative visit, no patients had a CCS score >1 (mean CCS score: 0.02; range: 0–0.43)
- No recurrences, reports of chronic pain, or long-term seromas were recorded at the 1-year post-operative visit
CONCLUSION

The insertion of self-gripping mesh without the use of any additional fixation during a laparoscopic TEP inguinal hernia repair is feasible and safe and is associated with very low pain scores in the immediate post-operative period as well as for at least 1 year afterward. Our cohort had a rapid recovery, quick return to work, and low CCSTM scores. At the 1-year follow-up visit, there were no recurrences and no patients reported any chronic pain as defined by a CCS™ >1.

This concludes the clinical synopsis of this publication

REFERENCES
None

IMPORTANT: Please refer to the package insert for complete instructions, contraindications, warnings and precautions.