

Outside of guidelines: Successful Desarda technique for primary inguinal hernias

Invited Commentary to "A single-blind, randomized controlled study to compare Desarda technique with Lichtenstein technique by evaluating short- and long-term outcomes after 3 years of follow-up in primary inguinal hernias. Int J Abdom Wall Hernia Surg 2019;2:16-22"

For many years, the only quality criteria used after a hernia operation was the recurrence rate. Subsequently, the tension-free concept was developed and is now used throughout the world. In recent years, the focus has increasingly shifted to possible chronic pain after hernia surgery. Based on these two criteria, the currently applicable "International Guidelines for Groin Hernia Management" published by the HerniaSurge Group recommends the use of mesh as a rule, either endoscopically via transabdominal preperitoneal or total extraperitoneal or in open surgery using the Lichtenstein technique.^[1]

However, newer studies have shown that use of the Lichtenstein technique is possibly linked to a higher rate of postoperative pain.^[2] The guidelines currently do not include alternative open surgical techniques, particularly mesh-free techniques, due to the small amount of scientific evidence. However, in recent years, numerous reports on postoperative pain after mesh implantation^[3] and mesh-related complications^[4] have led to increasing uncertainty among patients. Moreover, there have recently been register studies that showed at least equally good results for the mesh-free procedures for selected patients.^[5,6] Thus, the mesh-free procedures are regaining importance.^[7]

The Desarda technique is a newer surgical technique developed in India,^[8,9] which in the meantime should indeed be recognized as an alternative not only to the Shouldice technique but also to the established, guideline-compliant techniques. The first meta-analyses published in 2017 and 2018 revealed results that are at least equally good with regard to rates of recurrence and postoperative pain compared to the Lichtenstein technique.^[10,11]

The learning curve for the Desarda technique appears to be shorter than that for the Shouldice technique due to the simplicity of the method in any case. Mohan P. Desarda, the first to describe the eponymous technique, sees an indication for nearly every inguinal hernia. Based on our experience, this technique should be used primarily

for smaller or medium-sized indirect as well as direct hernias and particularly for younger patients. However, in our opinion, it cannot be recommended in the event of general tissue weakness with a divided aponeurosis of the external oblique muscle. In any case, the transversal fascia should be split intraoperatively to effectively exclude a femoral hernia. For complex or combined hernias as well as for femoral hernias, the Desarda technique should not be used due to the expected weakness in the collagen tissue. A major advantage of open hernia surgery compared to endoscopic surgery is the option of intraoperative tailoring. With corresponding intraoperative findings, an anterior or posterior mesh technique can be used as a fallback.

The current work focuses on the long-term outcomes and confirms, even after 3 years, results which are at least as good as those of the exhaustively studied Lichtenstein technique. This method, like the Lichtenstein technique, can be used in almost every setting, i.e., in so-called "low-resource countries" as well. Moreover, particularly in "low-resource countries," the continuous availability of mesh is still not guaranteed today. The use of so-called "low-cost meshes"^[11] recommended in the current international guidelines has also been increasingly criticized in recent years in view of the product properties with regard to sterilization^[12] and the European Medical Devices Regulation.

Another new aspect in the study is the evaluation of functionality after the surgery. The Patient Global Impression of Change and the Prolo Scale are standardized instruments for measuring patient outcomes that have been used since 2004.^[13] Here as well, this mesh-free procedure appears to have advantages particularly with regard to long-term outcomes.

The tailored concept recommended by the authors should be reviewed in additional differentiated comparative studies using the recognized European hernia classifications. At the same time, a clear, binding standard for surgery with intraoperative exploration of all potential hernia gaps should be defined and the results reviewed as well in large-scale register studies.

In view of the aforementioned results, the question remains as to what effect guidelines fundamentally have on health care services? The primary goal of guidelines is

the standardization of preoperative preparation, surgical treatment, and aftercare of the patient to improve the quality of a surgical intervention across the board. The recommendations provided in guidelines reflect the external evidence, i.e., the results of reliable scientific studies. Guidelines must never be hostile to innovation; however, as clearly noted in the guidelines of the HerniaSurge Group, they provide suggestions for further studies to review new or insufficiently investigated methods.^[1] Furthermore, both regional and continental differences in particular must be taken into account. In addition, possible industry influence on studies in which mesh-based procedures are extolled must not be ignored.^[14] The fundamental recommendation of the HerniaSurge Group to use mesh-based procedures must therefore be very critically scrutinized.

Unfortunately, it is already clear today that there are hardly any qualified hernia surgeons who regularly offer their patients standardized, high-quality, and mesh-free surgical procedures. As a rule, the training program for every surgeon should include a suturing procedure, a mesh-based open surgical technique, and a laparoendoscopic technique.

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Submission: 02-01-2019

Accepted: 02-01-2019

References

- HerniaSurge Group. International guidelines for groin hernia management. *Hernia* 2018;22:1-65.
- Miserez M, Peeters E, Aufenacker T, Bouillot JL, Campanelli G, Conze J, *et al.* Update with level 1 studies of the European Hernia Society guidelines on the treatment of inguinal hernia in adult patients. *Hernia* 2014;18:151-63.
- Fischer JE. Hernia repair: Why do we continue to perform mesh repair in the face of the human toll of inguinodynia? *Am J Surg* 2013;206:619-23.
- Iakovlev V, Koch A, Petersen K, Morrison J, Grischkan D, Oprea V, *et al.* A pathology of mesh and time: Dysejaculation, sexual pain, and orchialgia resulting from polypropylene mesh erosion into the spermatic cord. *Ann Surg* 2018;267:569-75.
- Malik A, Bell CM, Stukel TA, Urbach DR. Recurrence of inguinal hernias repaired in a large hernia surgical specialty hospital and general hospitals in Ontario, Canada. *Can J Surg* 2016;59:19-25.
- Köckerling F, Koch A, Adolf D, Keller T, Lorenz R, Fortelny RH, *et al.* Has Shouldice repair in a selected group of patients with inguinal hernia comparable results to Lichtenstein, TEP and TAPP techniques? *World J Surg* 2018;42:2001-10.
- Lorenz R. Do we really need a renaissance of pure tissue repair? Invited comment to: Desarda's technique versus Lichtenstein technique for the treatment of primary inguinal hernia: A systematic review and meta-analysis of randomized controlled trials. *Emile S, Elfeki H. Hernia* 2018;22:397-8.
- Desarda MP. New method of inguinal hernia repair: A new solution. *ANZ J Surg* 2001;71:241-4.
- Desarda MP. No-mesh inguinal hernia repair with continuous absorbable sutures: A dream or reality? (A study of 229 patients). *Saudi J Gastroenterol* 2008;14:122-7.
- Emile SH, Elfeki H. Desarda's technique versus Lichtenstein technique for the treatment of primary inguinal hernia: A systematic review and meta-analysis of randomized controlled trials. *Hernia* 2018;22:385-95.
- Ge H, Liang C, Xu Y, Ren S, Wu J. Desarda versus Lichtenstein technique for the treatment of primary inguinal hernia: A systematic review. *Int J Surg* 2018;50:22-7.
- Mitura K, Koziel S. The influence of different sterilization types on mosquito net mesh characteristics in groin hernia repair. *Hernia* 2018;22:483-90.
- Hurst H, Bolton J. Assessing the clinical significance of change scores recorded on subjective outcome measures. *J Manipulative Physiol Ther* 2004;27:26-35.
- Probst P, Grummich K, Ulrich A, Büchler MW, Knebel P, Diener MK, *et al.* Association of industry sponsorship and positive outcome in randomised controlled trials in general and abdominal surgery: Protocol for a systematic review and empirical study. *Syst Rev* 2014;3:138.

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DOI:

10.4103/ijawhs.ijawhs_1_19

How to cite this article: Lorenz R. Outside of guidelines: Successful Desarda technique for primary inguinal hernias. *Int J Abdom Wall Hernia Surg* 2019;2:23-4.