

LAPAROSCOPIC COLPOSACROPEXY: A NEW DESIGN OF MESH

Introduction

The use of laparoscopy in the treatment of prolapse has progressed significantly in recent decades. Several groups have shown excellent results for laparoscopic colposacropexy in surgical parameters, durability results, minimal complications and high rates of satisfaction.

Traditionally, laparoscopic colposacropexy has been associated with greater technical difficulty and increased operative time while requiring surgical skills and special training as the dissection of specific anatomical areas and the realization of intracorporeal sutures or knots. This has had a negative impact on the wide acceptance of laparoscopic techniques in routine surgical practice for the treatment of prolapse.

Design

The proposed design for this mesh is based on a “butterfly wings” model. The mesh consists of two lower arms which are anchored to the levator ani muscle; two lateral arms to cover the lateral and anterior compartments of the vagina which are fixed with a single suture in the anterior compartment, and finally, an upper arm for apical support attached to the vaginal cupula with two sutures and with one non-absorbable suture to the promontory. Thus, the mesh can be securely fixed to vagina using only six sutures.

The broad lateral arms allow to cover all the whole length of the vagina (anterior and laterally) and have a curvature in the lower part in order not to interfere with the entry of the ureters into the bladder.

Results

We compared the mean **surgical time** (min) between two groups of patients with laparoscopic colposacropexy with or without subtotal hysterectomy associated, with two different mesh designs.

- Group 1 (n = 12): Double mesh. (2010-2011)
- Group 2 (n = 14): "Butterfly wings" mesh. (2012-2013)

Table 1. Surgical time (min)

	Group 1	Group 2
Colposacropexy	136 (120-180)	94 (45-120)
Subtotal hysterectomy + colposacropexy	166 (110-200)	126 (105-175)

We observe a shorter surgical time in the group of patients with the “butterfly wings” mesh. The procedures were performed in the same hospital and by the same surgeons with extensive experience in this surgical technique (over 10 years), so we assume that the learning curve does not influence the differences in the mean surgical time.

Conclusion

The proposed mesh design aims to facilitate the placement of the prosthetic material covering all the vaginal compartments and minimize surgical time while fewer sutures are required for the attachment of the mesh.

References

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Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** Because it is the routine surgical practice **Helsinki not Req'd:** It is not a clinical trial **Informed Consent:** Yes