

# Clinical paper



Medtronic provides the following synopsis of a clinical publication involving V-Loc™ sutures.

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**TITLE** Comparison of Unidirectional Barbed Suture Compared to Conventional Braided Suture at the Time of Cesarean Section

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## INTRODUCTION

Reported use of bidirectional barbed sutures in gynecologic procedures have demonstrated their effectiveness with non-inferior results when compared to conventional closure methods during the closure of the hysterotomy site during laparoscopic myomectomies, closure of the vaginal cuff in laparoscopic hysterectomies, and closure of skin incisions during Cesarean section. To date however there have been no studies to evaluate the safety, peri-operative outcomes and efficacy of the barbed suture for closure of the hysterotomy, peritoneal, fascial incision, subcutaneous tissue and skin at the time of Cesarean section on human subjects.

## PURPOSE OF THE STUDY

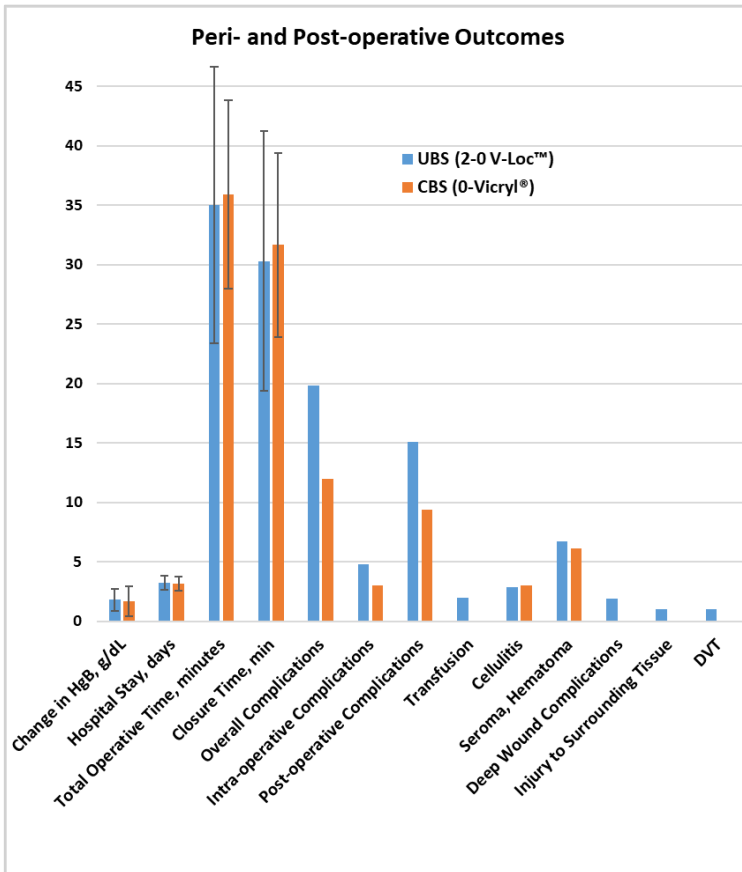
The purpose of this study was to assess outcomes related to the use of Unidirectional Barbed Suture (UBS) with respect to safety and efficacy compared to Conventional Braided Suture (CBS) at the time of Cesarean section.

## METHODS

- This study was a retrospective cohort study of 135 patients who underwent Cesarean section from January 2008-October 2013 by a single practitioner at Miami Valley Hospital in Dayton, Ohio. Patients who underwent Cesarean section with a Pfannenstiel skin incision using UBS were compared with the patients who underwent Cesarean section with closure using CBS.
- For the UBS group (N=106) the surgeon primarily used the 2-0 V-Loc™ (Medtronic) suture and therefore less control subjects were studied in the given time frame.
- For the CBS group (N=32) the hysterotomy was repaired within a single layer with 0-Vicryl® (Ethicon) in a running locked fashion.

## RESULTS

- Peri-operative outcomes (total operative time, closure time, estimated blood loss, change in HgB, hospital stay) were similar between the two groups.
- Post-operative outcomes (overall complications, intra-operative complications, post-operative complications, transfusion, cellulitis, seroma/hematoma, deep wound complications, injury to surrounding structure, DVT) were similar between the two groups.



## CONCLUSION

The authors conclude that there are similar risk profiles using UBS compared CBS closures and may be considered as an adjunctive suture for closure of the hysterotomy, fascia and skin during Cesarean section based on the similar safety and efficacy between the suture types.

**\*\*THIS CONCLUDES THE CLINICAL SYNOPSIS OF THIS PUBLICATION\*\***