

## Pre-operative transvaginal clamping of uterine a. descending branches, a safe and reliable manoeuvre to prevent profuse LUS bleeding during Caesarean Section for Central Placenta previa. A preliminary report

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**SUMMARY:** Pre-operative transvaginal clamping of uterine a. descending branches, a safe and reliable manoeuvre to prevent profuse LUS bleeding during Caesarean Section for Central Placenta previa. A preliminary report.

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*A procedure is hereby described consistent with a significant reduction of hysterotomy and placenta implantation site bleeding during CS for placenta previa.*

**RIASSUNTO:** Prevenzione delle emorragie profuse dal SUI, nel corso di T.C.: per Placenta previa mediante forcipressura transvaginale delle branche discendenti delle a. uterine. Comunicazione preliminare.

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*Venne descritta una tecnica mininvasiva che permette di ridurre significativamente l'orrhagia dal SUI nel corso di T.C. per placenta previa. La tecnica consiste nella forcipressura, bilaterale, mediante pinze ad anelli, per via vaginale della branca discendente dell'arteria uterina.*

**KEY WORDS:** Placenta previa.  
Placenta previa.

### Preface

Intra-operative bleeding during C.S. is in most instances well controlled through a variety of procedures, among them the stepwise uterine devascularization - the one preferred by us - which starts from bilateral uterine a. ascending branches ligature (Waters, 1952; Fahmy, 1987; Domini-Guazzini, 2006) and, whether required, proceeds with ovarian a. uterine branch, mono or bilateral ligature.

This procedure proves most effective in controlling the bleeding from the upper part of LUS and body of the uterus whose blood supply is provided by the uterine arteries ascending branches, while is of little or no effect on the bleeding from LUS whose blood supply

is mainly provided by the uterine a. descending branches.

In multiparous mothers where placenta previa is most likely to occur, the bleeding, due to poor decidual response of LUS, may be of such entity as to lead to disaster.

As intraoperative ligation of descending branches is very difficult, several procedures, as an alternative, have been proposed, ranging from haemostatic stitches on the implantation site bleeding spots to continuous longitudinal sutures running along the whole height of LUS.

However, these procedures, they all have in common being employed when profuse bleeding is already on, and also when haemostasis is achieved, the blood loss - mainly in tropical environment where anaemia is endemic and blood is not always available - may be of such an entity as to impair or to prolong the recovery of the mother.

So pre-operative reduction of blood supply to the LUS was taken into consideration.

Post partum haemorrhage (PPH) management through transvaginal clamping of uterine a. was first pro-

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posed by von Henkel (1905) and a purposefully shaped, toothed forceps was employed; but as injuries to the ureters were not infrequent an occurrence, the technique was soon discontinued to be proposed again by Brigato (Brigato, 1998; Guidi, 2007); a sponge holding forceps, replacing with gratifying results, the van Henkel one.

Due to the sound anatomical basis of this procedure and its effectiveness in controlling PPH we thought of it as a suitable preoperative, prophylactic measure against profuse or incontrollable bleeding from LUS during CS for placenta previa.

## Procedure

Five sponge holding forceps and a Sims retractor are needed. The Pt. is put into lithotomy position and the Sims retractor applied; the cervix is grasped at 3

o'clock with a sponge holding forceps and pulled opposite until a small wheal raises from the left lateral fornix, now well put into evidence and a sponge holding is applied on it; a downwards traction exerted and a second sponge holding forceps applied above. The same procedure is performed opposite.

CS performed, surprisingly quite bloodless.

The distal forceps removed after 12 h. the upper ones after 24 h.

The pressure exerted from the sponge holding forceps is not causing any injury to the ureter nor prevents urine from passing through.

## Conclusions

The procedure, up to now has been employed in three cases only, but the results are so promising as to suggest giving a preliminary report.

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