

HOHL Uterine Manipulator



HOHL Uterine Manipulator

Detailed Description

The HOHL Uterine Manipulator consists of a fixed handle, a manipulator rod, and cervical caps. The cervical caps serve as an operating platform and are available in three different sizes for a small, medium, or large cervix. Three spiral inserts allow for secure and safe cervical anchoring of the instrument. A working insert, which is available in different lengths, can be distally attached to the spiral insert enabling an extension for both small and large uteri. Furthermore, the manipulator with the atraumatic insert (optional) can also be used for oncological interventions.

The cervical cap is resistant to electrical and ultrasound energy and marks the border between the vagina and cervix exactly. The cap serves as a surgical platform on which decisive surgical steps such as bipolar coagulation of the uterine vessels and intrafascial detachment of the ligaments and vagina are performed in direct contact with the edge of the cap. These cervical caps have a special, anatomical design for the anterior and posterior vaginal fornices [Fig. 1].

The HOHL Uterine Manipulator allows a total, atraumatic and intrafascial (Tail™) laparoscopic hysterectomy.*



* DVD KS 652: Total atraumatic and intrafascial laparoscopic hysterectomy using the HOHL Uterine Manipulator.

Description of the Uterine Manipulator and the Typical (Tail™) Hysterectomy Technique

- Thanks to intensive screwing with the cervix uteri, one of the uterine manipulator's main uses is generating the indispensable tension on the tissue required for all anatomical surgical procedures [Fig. 1].
- Additionally, this safely distances endangered neighboring organs (bladder, ureter).
- The cranial displacement of the uterus renders detachment of the bladder unnecessary, this means that its neural supply remains completely intact [Fig. 2]. This cranial displacement makes it possible to perform a genuine, intrafascial hysterectomy without the endopelvic fascia being destroyed. This protects against postoperative enteroceles and prolapse of the vagina.
- Electrosurgical bipolar coagulation of the uterine artery at the edge of the cervical cap with no bleeding (= large distance to ureter) [Fig. 3].
- At the end, the cap lying exactly and securely at the border between the vagina and the cervix allows safe transsection of the vagina with no bleeding and electrical transsection of the ligaments at the paracervix with the preservation of the ligaments (intrafascially) of the endopelvic fascia [Fig. 4].
- Even after transsection of the vagina, the cap maintains the seal without intraabdominal CO₂ gas escaping to the vagina. Following complete transsection of the vagina, the uterus can be pulled back into the vagina until the laparoscopic closure of the vagina is performed.
- Exact joining of the ventral, lateral, and dorsal endopelvic fascia without overlap using Z-sutures or continuous sutures [Fig. 5].

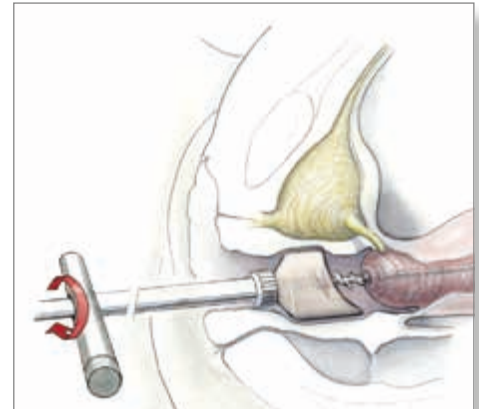


Fig. 1:
The HOHL Uterine Manipulator is screwed securely into the cervix via a helical thread.

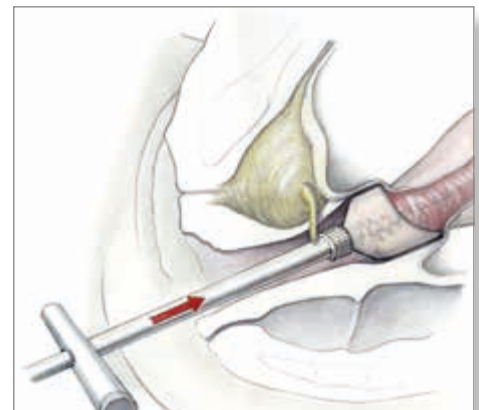


Fig. 2:
Distancing of the bladder and ureter by tensioning the uterus; the tissue is placed under tension.



Fig. 3:
Bipolar coagulation of the uterine vessels at the edge of the cervical cap at a large distance from the ureter and bladder.

Large Uterus Myomatosis

In very large uteri, first the adnexa is detached, then the uterine arteries are identified at the edge of the cervical cap and coagulated with bipolar current at a safe distance from the ureter [Fig. 6]. This completely stops the blood supply to the uterus and, before detaching the ligaments and the vagina, the uterus can be morcellated using an electric morcellator, e.g. the ROTOCUT G1 morcellator from KARL STORZ. During this operative step, the large uterus can be pushed in all directions by the firmly anchored manipulator, which makes the morcellation considerably easier.

Clinical Experience

Over 1,400 patients have been involved and now summarized in a prospective cohort study (Hohl, M.K., Hauser, N., Safe total intrafascial laparoscopic Tail™ Hysterectomy: a prospective cohort study. *Gynecol Surg* 2010 Sep;7(3):231-239).

Severe complications using the Tail™ Hysterectomy technique have occurred significantly less, compared to abdominal hysterectomy. Compared to both abdominal as well as vaginal hysterectomy, minor complications occurred significantly less after Tail™ Hysterectomy. There has been no difference between the complications occurring with experienced surgeons and surgeons in training.

Prof. Michael K. Hohl,
Canton Hospital Gynecology Center
5404 Baden, Switzerland



Fig. 4:
Intrafascial detachment of the ligaments and vagina directly at the edge of the cervical cap.

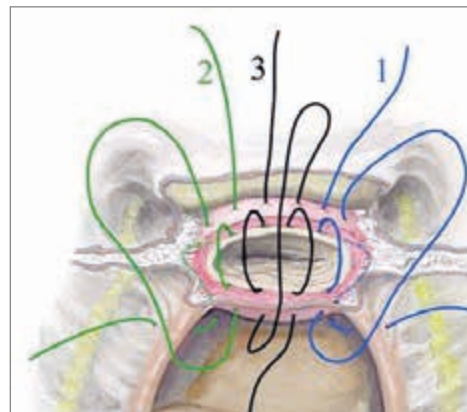


Fig. 5:
Joining of the vagina and endopelvic fascia with no overlap.



Fig. 6:
Detachment of uterine vessels at the edge of the cervical cap in cases of large uterus myomatosis.

HOHL Uterine Manipulator

Feature

- HOHL Uterine Manipulator
- Minimal dissection
- Only electrosurgery
No ligatures
No staples
- Laparoscopic
vaginal closure

Advantage

- > Stretching of tissue
- > Surgical platform
- > Ureter protection
- > Bladder protection (no denervation)
- > Minimal trauma
- > Preservation of the fascia ring
(intrafascial hysterectomy)
- > Minimal blood loss
- > Minimal stump necrosis
- > Minimal scarring
- > Low costs
- > Simpler surgery
- > Shorter duration of surgery
- > Extended indication for surgery



26168 K HOHL **Uterine Manipulator**, complete,

including:

Handle

Manipulator Rod

Cap, size 46 x 39 x 38 mm

Cap, size 41 x 39 x 38.5 mm

Cap, size 38 x 36 x 39 mm

Spiral Insert, diameter 20 mm

Spiral Insert, diameter 15 mm

Working Insert, length 60 mm

Working Insert, length 80 mm

Working Insert, length 100 mm

Key, for Spiral Inserts

Recommended Accessories:

26168 KH **Working Insert**, length 40 mm

26168 KN **Working Insert**, length 30 mm

26168 KP **Spiral Insert**, large, diameter 25 mm

26168 KQ **Atraumatic Insert**, diameter 8 mm



THE DIAMOND STANDARD

KARL STORZ Endoscopy-America, Inc.
2151 East Grand Avenue
El Segundo, CA 90245-5017, USA
Phone: +1 424 218-8100
Phone toll free: 800 421-0837 (US only)
Fax: +1 424 218-8525
Fax toll free: 800 321-1304 (US only)
E-Mail: info@ksea.com

KARL STORZ GmbH & Co. KG
Mittelstraße 8, 78532 Tuttlingen, Germany
Postbox 230, 78503 Tuttlingen, Germany
Phone: +49 (0)7461 708-0
Fax: +49 (0)7461 708-105
E-Mail: info@karlstorz.com

www.karlstorz.com



Health
made in Germany

www.health-made-in-germany.com