ENDOWORLD®
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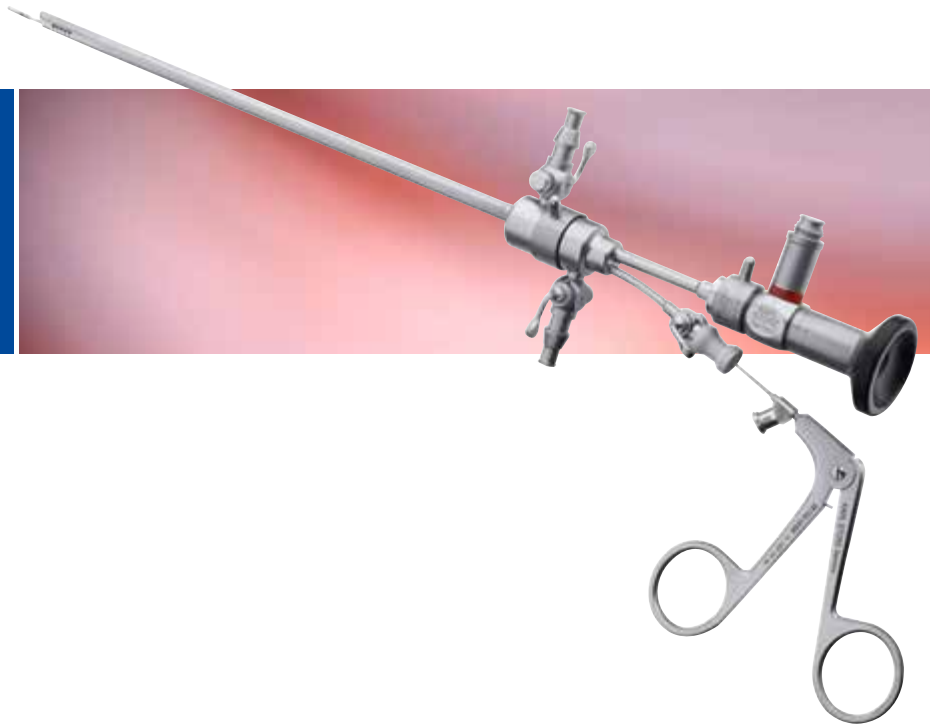
Office Hysteroscopy

BETTOCCHI® Hysteroscopes with semirigid instruments



KARL STORZ — ENDOSKOPE

Office Hysteroscopy

BETTOCCHI® Hysteroscopes with Semirigid Instruments

Introduction

Since the early 1980s, hysteroscopy has offered excellent diagnostic opportunities in the assessment of the cervical canal and uterine cavity. As a surgical tool, it achieves better results than dilation and curettage or other blind procedures. It is also an excellent tool for treating intrauterine disorders (Ref. 1, 2, 3). For years, diagnostic and surgical procedures were considered as two separate procedures requiring different methods, instruments, and preparations (Ref. 4).

The introduction of the new rod lens telescopes with diameters of 2-3 mm allowed the production of very slender diagnostic and surgical sheaths with diameters of 5 mm or less. Surgeons can now perform diagnostic procedures using a surgical hysteroscope with mechanical instruments and an outer diameter of no more than 5 mm. This perfect “diagnostic” instrument enables the visual examination of the uterine cavity while offering surgical options. Surgeons are able to inspect the uterine cavity and take specific hysteroscopic biopsies from the suspect areas. In addition, benign uterine disorders (e.g., polyps or adhesions) can be treated without premedication or anesthesia. This is referred to as see-and-treat hysteroscopy (Ref. 4).

One of the newest hysteroscopes is the BETTOCCHI® continuous-flow hysteroscope, size 4 mm, for outpatient procedures; it is based on a 2 mm rod lens system and has an outer diameter of 4 mm. A larger version of this hysteroscope is also available, with an outer diameter of 5 mm. Both hysteroscopes offer two sheaths (one for irrigation, one for suction), a working channel for semirigid 5 Fr. surgical instruments and electrodes (approx. 1.6 mm). Their oval shape facilitates atraumatic insertion into the cervical canal. Various surgical instruments and bipolar electrodes 5 Fr. in size are already available.

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Use and Special Features of the BETTOCCHI® Hysteroscope

- **Oval Shape** (Image 1):
  One of the major problems for endoscopists is the passage of the hysteroscope through the ICO (Internal Cervical Os), that usually represents a technical obstacle causing related pain for the patient. It has already been pointed out that the ICO is normally oval, with a transverse main axis and a diameter of approximately 4-5 mm. Therefore, if we want to insert a round hysteroscope of a size of 5 mm through it we will have to modify the spatial disposition of the muscle fibers, stretching some of them (Fig. 1). This maneuver will stimulate the sensitive fibers, causing pain to the patient.
  The new generation of hysteroscopes, featuring an oval profile and a total diameter between 4 and 5 mm, is more strictly correlated to the anatomy of the cervical canal. It is sufficient to rotate the scope on the endo-camera by 90° to align the longitudinal main axis of the scope with the transverse axis of the ICO (Fig. 2).

Image 1: Oval Shape - reduced size, for easier introduction

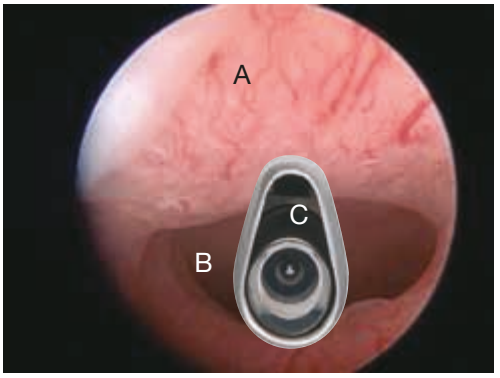


Fig. 1: Perspective view of the Internal Cervical Os and the hysteroscope profiles in a traditional introduction
A: Cervix
B: Internal Cervical Os
C: Hysteroscope profile

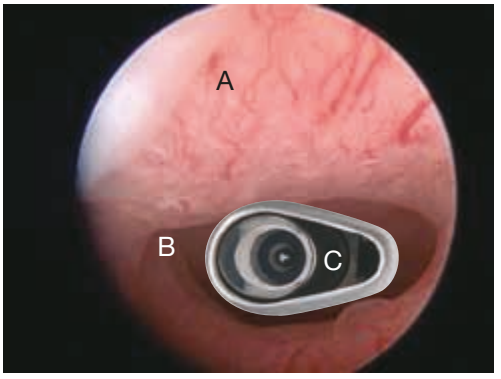
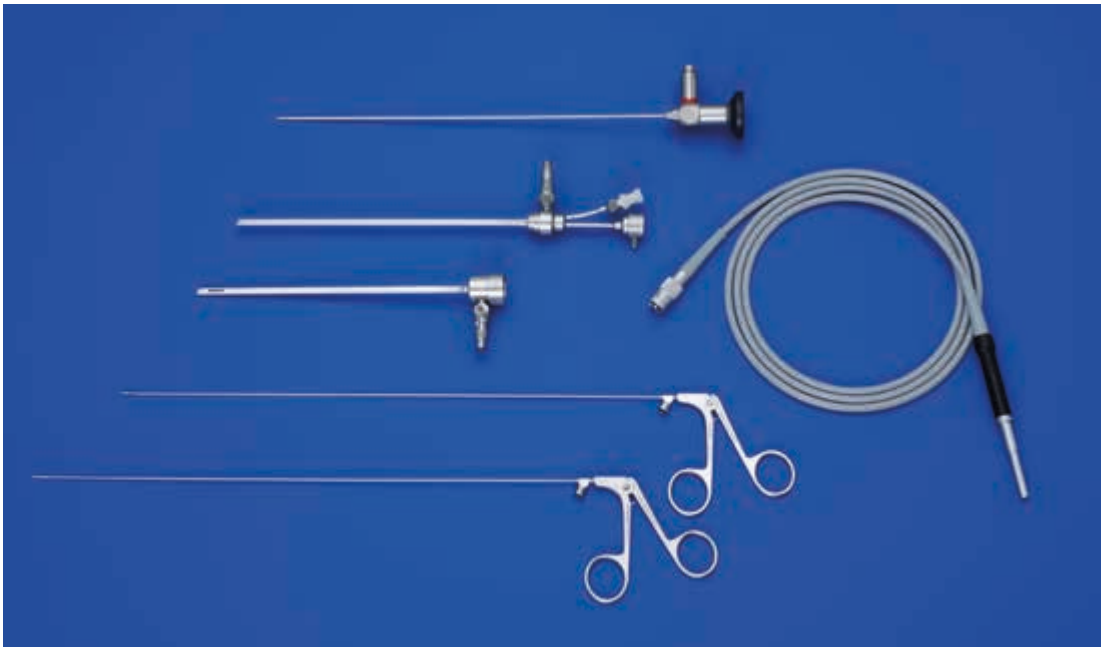


Fig. 2: Perspective view of the Internal Cervical Os and hysteroscope profiles after 90° rotation
A: Cervix
B: Internal Cervical Os
C: Hysteroscope profile

BETTOCCHI® **Recommended Set, Size 4 mm**
(Based on a 2 mm telescope)

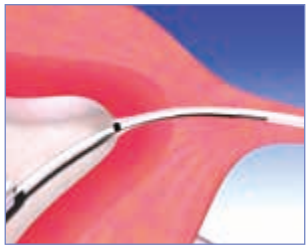


26008 BA	**HOPKINS® Forward Oblique Telescope 30°,** diameter 2 mm, length 26 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
26152 BI	BETTOCCHI® **Inner Sheath,** size 3.6 mm, with channel for semirigid 5 Fr. operating instruments, with one stopcock and one LUER-Lock adaptor, for use with Outer Sheath 26152 BO
26152 BO	BETTOCCHI® **Outer Sheath,** size 4.2 mm, with one stopcock and one LUER-Lock adaptor, for use with Inner Sheath 26152 BI
26159 SHW	**Scissors,** semirigid, pointed, single action jaws, 5 Fr., length 34 cm
26159 UHW	**Biopsy and Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm
495 NT	**Fiber Optic Light Cable,** with straight connector, diameter 2.5 mm, length 180 cm

BETTOCCHI® **Recommended Set, Size 5 mm**
(Based on a 2.9 mm telescope)

26120 BA	**HOPKINS® Forward Oblique Telescope 30°,** diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: red
26153 BI	BETTOCCHI® **Inner Sheath,** size 4.3 mm, with channel for semirigid 5 Fr. operating instruments, with one stopcock and one LUER-Lock adaptor, for use with Outer Sheath 26153 BO
26153 BO	BETTOCCHI® **Outer Sheath,** size 5 mm, with one stopcock and one LUER-Lock adaptor, for use with Inner Sheath 26153 BI
26159 SHW	**Scissors,** semirigid, pointed, single action jaws, 5 Fr., length 34 cm
26159 UHW	**Biopsy and Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm
495 NT	**Fiber Optic Light Cable,** with straight connector, diameter 2.5 mm, length 180 cm

The BETTOCCHI® hysteroscope (5 mm) is especially suitable for the Essure®* hysteroscopic sterilization method.



*Essure® microcoils are available from Bayer (for additional information see: www.essure.com).

Accessories

Reusable Operating Instruments (5 Fr.)

In addition to diagnostic assessment, the semrigid and reusable instruments listed below enable the operating surgeon to perform a wide range of surgical interventions, for example:

- Biopsy under direct visualization
- Dilation of a constricted cervical canal
- Removal of small polyps
- Removal of small myomas
- Septum dissection in infertile patients

26159 UHW **Biopsy and Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm

26159 SHW **Scissors,** semirigid, pointed, single action jaws, 5 Fr., length 34 cm

26159 DHW **Punch,** semirigid, through-cutting, single action jaws, 5 Fr., length 34 cm

26159 BHW **Biopsy Spoon Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm

26159 EHW **Scissors**, semirigid, blunt, single action jaws, 5 Fr., length 34 cm

26159 H HESSELING **Tenaculum Grasping Forceps**, semirigid, double action jaws, 5 Fr., length 34 cm

NEW

26159 DS DI SPIEZIO SARDO **Grasping Forceps**, semirigid, double action jaws, 5 Fr., length 34 cm

NEW

26159 HS HESSELING and DI SPIEZIO SARDO **Tenaculum Grasping Forceps with Spike**, semirigid, double action jaws, 5 Fr., length 34 cm

26159 M BETTOCCHI® **Myoma Fixation Instrument,** semirigid, 5 Fr., length 34 cm

26159 G BETTOCCHI® /DI SPIEZIO SARDO **Palpation Probe,** semirigid, graduated, 5 Fr., length 34 cm

Reusable Bipolar Electrodes

Reusable bipolar electrodes enable the following interventions to be performed, using saline solution as distension medium:

- Septum dissection
- Cutting polyps or myomas
- Management of uterine abnormalities
- Coagulation of small blood vessels
- Adhesiolysis

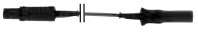
26158 BE **Bipolar Dissection Electrode,** semirigid, 5 Fr., needle electrode angled 90°, length 36 cm

26159 BE **Bipolar Dissection Electrode,** semirigid, 5 Fr., length 36 cm

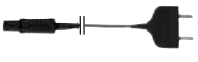
26159 GC GORDTS/CAMPO **Bipolar Ball Electrode,** semirigid, 5 Fr., length 36 cm

The bipolar electrodes are compatible with any high frequency generator which has a bipolar output. Different bipolar high frequency cords are available.

26176 LE **Bipolar High Frequency Cord,** length 300 cm, for AUTOCON® II 400 SCB system (111, 113, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, KARL STORZ Coagulator 26021 B/C/D, 860021 B/C/D, 27810 B/C/D, 28810 B/C/D, AUTOCON® series (50, 200, 350), Erbe-Coagulator, T and ICC series



26176 LM **Bipolar High Frequency Cord,** length 300 cm, for use with Martin HF units



26176 LV **Bipolar High Frequency Cord,** length 300 cm, AUTOCON® II 400 SCB system (112, 114, 116, 122, 125) AUTOCON® II 200, AUTOCON® II 80 and Valleylab coagulators

KARL STORZ TELE PACK X LED

The TELE PACK X LED system is an all-in-one unit that allows performance of high-quality outpatient hysteroscopies in minimum space with maximum comfort. This innovative device integrates a monitor, camera, documentation terminal and a powerful, yet quiet LED light source in one compact unit.

TELE PACK X LED provides good visualization of hysteroscopic findings on the brilliant 15" flat screen monitor with LED backlight. Six USB ports and one SD card slot enable the storage of images and videos as well as direct print-outs in combination with compatible medical USB printers.

In combination with KARL STORZ hysteroscopes, this unit provides a high-quality, multifunctional and compact system for outpatient hysteroscopies.

TP100 EN	**TELE PACK X LED,** endoscopic video unit for use with all KARL STORZ TELECAM one-chip camera heads and video endoscopes, incl. LED-light source similar to Xenon technology, with integrated digital Image Processing Module, 15" LCD monitor with LED backlight, USB/SD memory module, color systems PAL/NTSC, power supply 100 – 240 VAC, 50/60 Hz including: **USB Silicone Keyboard,** with Touchpad, with US character set **USB Stick,** 8 GB **Mains Cord**
20212030	**TELECAM One-Chip Camera Head,** color system PAL, soakable, gas-sterilizable, with integrated Parfocal Zoom Lens, f = 25 – 50 mm (2x), 2 freely programmable camera head buttons

References

1. Gimpelson R. J., Rappold H. O.
   A comparative study between panoramic hysteroscopy with directed biopsies and dilatation and curettage. A review of 276 cases.
   Am J Obstet Gynecol 1988; 158: 489-492.
2. Loffer F. D.
   Hysteroscopy with selective endometrial sampling compared with D&C for abnormal uterine bleeding: the value of a negative hysteroscopic view.
   Obstet Gynecol 1989; 73: 16-20.
3. Siegler A. M.
   Therapeutic hysteroscopy.
   Acta Europ Fertilit 1986; 17: 467-471.
4. Bettocchi S., Ceci O., Di Venere R. S., Pansini M. V., Pellegrino A., Marello F.
   Advanced operative office hysteroscopy without anaesthesia: analysis of 501 cases treated with a 5 Fr. bipolar electrode.
   Hum Reprod 2002; 17: 2435-2438.

Notes

Notes

It is recommended to check the suitability of the product for the intended procedure prior to use.

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