Office Hysteroscopy

BETTOCCHI® Hysteroscopes with semirigid instruments
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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).

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**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® II Forward Oblique Telescope 30°, diameter 2 mm, autoclavable, fiber optic light transmission incorporated, color code: red

26152 BI  BETTOCCHI® Operating Sheath, size 3.6 mm, with channel for semirigid 5 Fr. operating instruments, with one stopcock and one LUER-Lock adaptor, for use with Continuous-Flow Operating Sheath 26152 BO

26152 BO  BETTOCCHI® Continuous-Flow Operating Sheath, size 4.2 mm, with one stopcock and one LUER-Lock adaptor, for use with Operating 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, size 2.5 mm, length 180 cm
BETTCCCHI® Recommended Set, Size 5 mm
(Based on a 2.9 mm telescope)

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

*Essure® microcoils are available from the company Conceptus (for additional information see: www.essure.com).
Accessories
Reusable Operating Instruments (5 Fr.)

In addition to diagnostic assessment, the semirigid 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 M BETTOCCHI® Myoma Fixation Instrument, semirigid, 5 Fr., length 34 cm

26159 G BETTOCCHI® 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

The bipolar electrodes are compatible with any high frequency generator which has a bipolar output. Different bipolar high frequency cords are available.
The TELE PACK X system is a convenient and space-saving documentation terminal that enables outpatient hysteroscopies to be performed with first-class imaging. The powerful all-in-one unit integrates a monitor, camera and light source into a compact unit.

A very clear 15" flat screen provides an excellent display of hysteroscopic findings. Six USB ports and an SD card slot are available to store images and videos and for data transfer to other units (for example, to a PC).

In conjunction with BETTOCCHI® hysteroscopes, TELE PACK X is a comprehensive, multifunctional and compact system for outpatient hysteroscopy.

20 0450 01-EN **TELE PACK X**, endoscopic video unit for use with TELECAM one-chip camera heads and video endoscopes, incl. 50 W Hi-Lux light source, 15" LCD TFT screen, USB/SD memory module, color system PAL/NTSC, with integrated Image Processing Module, power supply 100 – 240 VAC, 50/60 Hz including:

- **USB Silicone Keyboard**, with touchpad, US character set
- **USB Flash Drive**, 4 GB
- **Mains Cord**

20 2120 30 **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
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