

## Office Hysteroscopy

BETTOCCHI® Hysteroscopes with semirigid instruments



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### Introduction

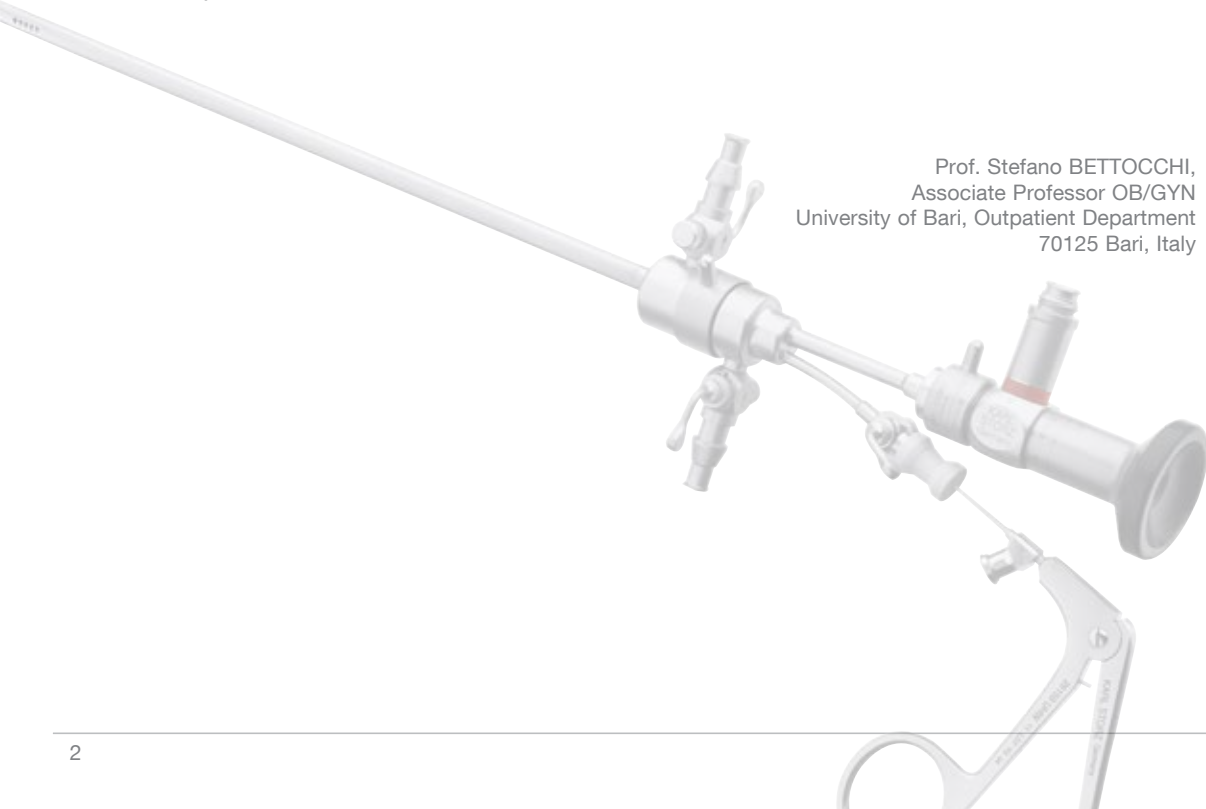
Since the early 1980s, hysteroscopy has offered excellent diagnostic opportunities in the assessment of the cervical canal and uterine cavity. As a surgical tool, it achieves better results than dilation and curettage or other blind procedures. It is also an excellent tool for treating intrauterine disorders (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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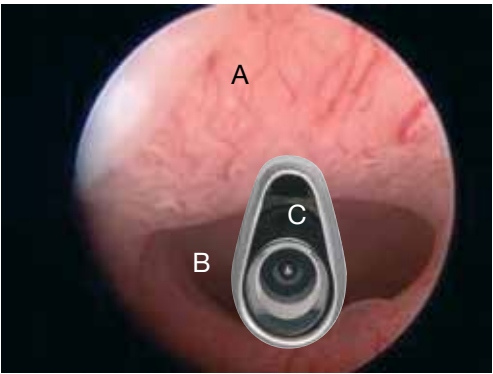


# Use and Special Features of the BETTOCCHI® Hysteroscope

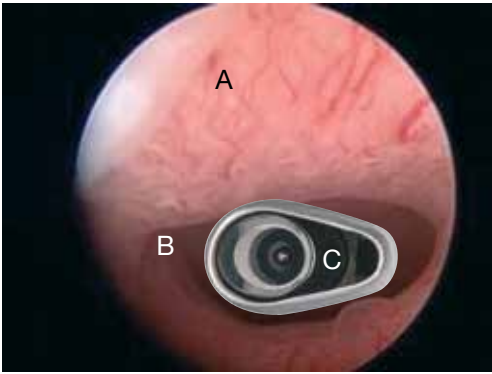
- Oval Shape (Image 1):**  
 One of the major problems for endoscopists is the passage of the hysteroscope through the ICO (Internal Cervical Os), that usually represents a technical obstacle causing related pain for the patient. It has already been pointed out that the ICO is normally oval, with a transverse 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).



**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)



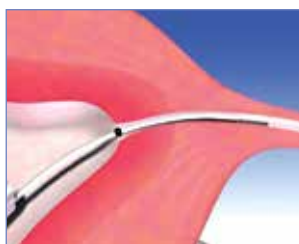
- |           |   |
|-----------|---|
| 26008 BA  | <b>HOPKINS® Forward Oblique Telescope 30°</b> , diameter 2 mm, length 26 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: red                       |
| 26152 BI  | BETTOCCHI® <b>Inner Sheath</b> , size 3.6 mm, with 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® <b>Outer Sheath</b> , size 4.2 mm, with one stopcock and one LUER-Lock adaptor, for use with Inner Sheath 26152 BI   |
| 26159 SHW | <b>Scissors</b> , semirigid, pointed, single action jaws, 5 Fr., length 34 cm   |
| 26159 UHW | <b>Biopsy and Grasping Forceps</b> , semirigid, double action jaws, 5 Fr., length 34 cm   |
| 495 NT    | <b>Fiber Optic Light Cable</b> , 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  | <b>HOPKINS® Forward Oblique Telescope 30°</b> , diameter 2.9 mm, length 30 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: red                     |
| 26153 BI  | BETTOCCHI® <b>Inner Sheath</b> , 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® <b>Outer Sheath</b> , size 5 mm, with one stopcock and one LUER-Lock adaptor, for use with Inner Sheath 26153 BI   |
| 26159 SHW | <b>Scissors</b> , semirigid, pointed, single action jaws, 5 Fr., length 34 cm   |
| 26159 UHW | <b>Biopsy and Grasping Forceps</b> , semirigid, double action jaws, 5 Fr., length 34 cm   |
| 495 NT    | <b>Fiber Optic Light Cable</b> , 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](http://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 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.



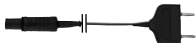
26176 LE

**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

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Therapeutic hysteroscopy.  
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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.  
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## Notes

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



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