

# Challenging the cervix: strategies to overcome the anatomic impediments to hysteroscopy: analysis of 31,052 office hysteroscopies

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**Objective:** To report our experience on 10,156 cases of cervical stenosis (CS) diagnosed at office hysteroscopy.

**Design:** Retrospective study.

**Setting:** Ambulatory clinics of diagnostic and operative hysteroscopy of two university teaching hospitals (Naples and Bari).

**Patient(s):** A total of 31,052 patients undergoing office hysteroscopy.

**Intervention(s):** All of the paper and electronic reports of the office hysteroscopies performed from January 1996 to September 2014 were reviewed. Hysteroscopies were classified as successful (i.e., when access to and visualization of the entire uterine cavity was possible during the same procedure), incomplete (i.e., when access to uterine cavity was possible, but the entire uterine cavity could not be examined), or failed (i.e., when access to uterine cavity was not possible). CS was classified on the basis of localization: stenosis of external cervical ostium (ECO; type I); stenosis of distal third of cervical channel and the internal cervical ostium (ICO; type II); stenosis of the ICO (type III), and combined stenosis of ECO and ICO (type IV).

**Main Outcome Measure(s):** The success rate at overpassing CS (including both successful and incomplete hysteroscopies) was the primary outcome measure. Secondary outcome measures were frequency and localization of CS in fertile and postmenopausal women and the frequency of use of technical maneuvers and/or miniaturized mechanical or bipolar instruments to overcome them.

**Result(s):** All hysteroscopies were performed with the use of a 5- or 4-mm rigid continuous-flow office operative hysteroscope by operators with different levels of expertise. The hysteroscopy technique used was standardized between the two centers and among all of the surgeons throughout the years. An access to the uterine cavity with a complete evaluation of the whole endometrial surface was possible in 93.9% of cases (29,152 patients). The main reasons of the 1,320 (4.3%) incomplete and 580 (1.9%) failed hysteroscopies were pain and CS, respectively. CS was identified in 10,156 women (32.7% of all procedures) and was significantly more frequent in postmenopausal than in fertile women (70.1% vs. 29.9%), except for type I stenosis, which was more frequent in fertile than in postmenopausal women. Type IV CS (44.3%) was the most commonly detected. Overall, CS was managed successfully with minimal discomfort in 98.5% of cases with technical maneuvers and miniaturized mechanical and/or bipolar instruments. Adhesiolysis with the distal tip of the hysteroscope by rotating the scope on the endocamera was the significantly more used strategy to overpass all types of CS (39.8% of cases), generally used in combination with miniaturized operative instruments (79.2%). Bipolar electrodes were more used in cases of type I and type IV stenosis (39.7%) compared with the other types of CS.

**Conclusion(s):** CS and pain represent the main reasons for failed hysteroscopy. Recent technical and technologic innovations, together with increased operator experience and optimal pain management, have made it possible to overcome even severe CS with the use of office hysteroscopy, thus significantly reducing the rate of failed procedures and the need for operating room and general anesthesia. (Fertil Steril® 2016;105:e16–7. ©2016 by American Society for Reproductive Medicine.)

**Key Words:** Anatomic impediments, cervical stenosis, miniaturized instruments, office hysteroscopy

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