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INVITED INSTRUMENT REVIEW

Office Hysteroscopy: TROPHYscope CAMPO Compact Hysteroscope ®

Manufacturer: KARL STORZ, Tuttlingen, Germany

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About the Reviewer



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In the early 1990s, outpatient procedures have increased in importance in gynecology since advances in technology and techniques made hysteroscopy less painful and less invasive [1, 2]. A major point for office hysteroscopy ("See and Treat Hysteroscopy") is that there is no need to use a speculum. A new atraumatic hysteroscopic technique, the so-called vaginoscopic, or no-touch technique was developed and the widespread saline solution as the preferred

distension medium as an alternative for CO₂. Nowadays, office hysteroscopy can be considered as the gold standard if it comes to the examination of the uterine cavity. In fact, it is overcoming the significant restrictions of intrauterine diagnostic curettage [2].

The above-mentioned "See and Treat" concept is what patients are asking for. They consult a gynecologist with their issue and want to leave the office without the problem. For that purpose, the physician has to invest in extracurricular training and equipment to perform ambulatory hysteroscopy [1] (Fig. 1).

However, modern office hysteroscopy benefits from the use of hysteroscopes with an outer diameter of less than 5 mm which can be used for diagnostics and minor operative procedures. Those hysteroscopes also eliminate the need to dilate the cervical canal which leads only to minimal discomfort for the patient. The new TROPHYscope®

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Fig. 1 The TROPHYscope®

CAMPO Compact Hysteroscope from KARL STORZ, Tuttlingen, Germany, is specially designed for the abovementioned purpose. It is based on a 2 mm HOPKINS® rod lens system with an integrated inflow channel. A continuous flow sheath or an operating sheath is positioned either in an active or passive position on the TROHPYscope[®]. At the start of the intervention, the primary access into the uterine cavity is carried out with an outer diameter of 2.9 mm, only, the corresponding sheath in the passive position. This small diameter facilitates the introduction of the hysteroscope into the uterine cavity and minimizes discomfort of the patient. It is advantageous for the examination of infertility patients and nullipara, as well as postmenopausal patients. If there is a need to clean the cavity (need for continuous flow), then further dilation up to 3.7 mm can be done by pushing the continuous flow sheath forward into the cavity guided by the telescope. For minor interventions, the extra operating sheath (overall diameter of 4.4 mm) with working channel for 5 Fr. instruments is used.

For visualization in hysteroscopy a compact, versatile and portable system like the TELE PACK X LED is ideal for the gynecologists' office. This system includes a 15" LCD TFT-monitor, a camera, a light source, and a module for data processing as well as data management via USB or SD card [2].

As mentioned above, hysteroscopic procedures require distension of the uterine cavity. The most common medium in use is saline solution [2]. Saline solution offers a neutral vision of the uterine cavity, permits specific evaluation of the endometrial pathologies, and offers the possibility to work with bipolar electrodes. With an electronic irrigation and suction pump like the HAMOU® ENDOMAT, a pressure- and flow-controlled constant intrauterine distension is provided [3] (Fig. 2).

Nowadays, hysteroscopy is the gold standard for evaluation and treatment of intrauterine pathologies. But as a matter of fact, it is still not widely used in daily practice. The major reason for this is the lack of teaching in hysteroscopy during conventional medical training. Furthermore, the conviction of the gynecologist and the patient that an office hysteroscopy, without anesthesia, may be more painful leads to interventions favoring the so-called traditional approach [2].

Traditional surgery and office surgery are no longer mutually incompatible. Indeed, they have undergone a Hegelian synthesis. Both interventions are complementary to each other. The pathology itself distinguishes if traditional surgery or office surgery is appropriate as many diseases that can be treated hysteroscopically and can be done within an ambulatory setting [2]. Most women who have undergone an office hysteroscopy are satisfied with the procedure, and prepared to recommend it or undergo this experience again if necessary [4].

Fig. 2 Tele pack + LED-System



Conflict of interest Rudy Leon De Wilde has received grants of the KARL STORZ Company to cover travel expenses to International Congresses.

References

- van Herendael BJ, Valle R, Bettocchi S. Ambulatory hysteroscopy diagnosis and treatment. oxford: Bladon Medical Publishing; 2004 iv/2
- Nappi C, Di Spiezio Sardo A. State-of-the-art hysteroscopic approaches to pathologies of the genital tract. Endo: Press Tuttlingen; 2014. ISBN 978-3-89756-450-3.
- Mencaglia L, de Albuquerque Cavalcanti, Neto L, Alfonso Arias Alvarez R. Manual of hysteroscopy—diagnostic, operative and office hysteroscopy. Endo: Press Tuttlingen; 2013. ISBN 978-3-89756-409-1.
- Justin Clark T, Gupta JK. Handbook of outpatient hysteroscopy—a complete guide to diagnosis and therapy (Hodder Arnold Publication). Oxford: Oxford University Press; 2005. ISBN 978-0-34081-651-6.

