

Measurements and Main Results: Of 43 women, 31 had Postmenopausal bleeding, 12 had abnormal menstrual bleeding. Mean age 59, range 26-92 years. 37 had biopsies using grasper forceps 11 had a Pipelle sample, 5 had both. Biopsy type Number of patients Insufficient for diagnosis %

Grasper 32 16

Pipelle 7 43

Both 5 0

When analysed per patient the relative risk of insufficient for diagnosis is 0.37 (95%CI 0.113- 1.18 p=0.09).

Biopsy type Mean (g) Range

Pipelle 1.03 0.2-2.9

Grasper 0.14 0.1-0.4

Pipelle sampling obtained more tissue (p= 0.006).

Hyperplasia/carcinoma was diagnosed in 4 patients – all diagnosed using both biopsy methods.

Conclusion: Despite the larger tissue yield with pipelle biopsy this does not equate to a lower insufficient for diagnosis outcome, suggesting that targeted biopsy may be of higher quality. We conclude that both methods of biopsy might be optimal, in particular when a diffuse abnormality is found at hysteroscopy.

372 Open Communications 19—Advanced Endoscopy (9:36 AM — 9:41 AM)

Review of Robotic Assisted Gynecologic Surgeries Utilizing the BeamPath® CO2 Laser Energy

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Study Objective: The BeamPath® CO2 laser fiber with its advanced, precise characteristics enables various applications in minimally invasive gynecologic procedures. This is particularly feasible using the new generation laser fiber because of its higher power output as well as increased durability and flexibility of the fiber sheath. Multiple robotic assisted gynecologic procedures are presented emphasizing the versatility of CO2 laser energy in minimally invasive gynecologic surgeries.

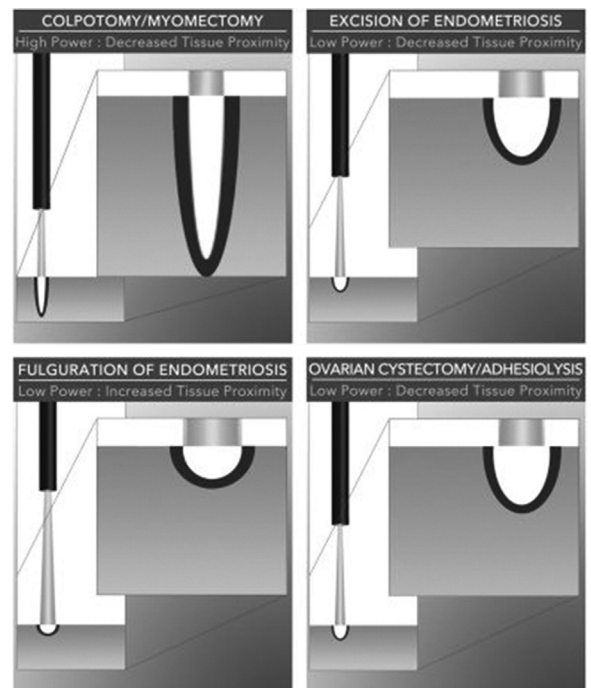
Design: Review of six minimally invasive robotic gynecologic procedures utilizing the new generation of CO2 laser fiber.

Setting: Community based urban teaching hospital with advanced laparoscopic and robotic technology.

Patients: Six patients undergoing robotic assisted gynecologic surgery with various indications.

Intervention: Robotic assisted gynecologic procedures are presented where CO2 laser energy is utilized.

Measurements and Main Results: The new generation BeamPath® CO2 laser fiber was successfully utilized to perform multiple minimally invasive gynecologic surgeries. Six separate robotic procedures are presented: 1. Myomectomy, 2. Excision of endometriosis, 3. Fulguration of endometriosis, 4. Colpotomy, 5. Adhesiolysis, and 6. Ovarian cystectomy. In order to perform various robotic procedures, different characteristics of CO2 laser energy were applied selectively: power output, distance from the tissue, and dwell time. The range of power output used was 2-18 W, the distance and dwell time varied depending on surgery type and tissue treated. Additionally, the divergent beam enables versatility between four different modes of laser tissue interaction: cutting, vaporization, fulguration, and coagulation (Figure 1) and (Figure 2).



Conclusion: CO2 laser technology used in robotic gynecologic procedures is a precise, safe, efficient and versatile technique, which enables performance of diverse gynecologic procedures. Adequate knowledge of the technology characteristics, mechanism of action, and applicability will provide the gynecologic surgeon a better understanding on indication of use and facilitate patient safety.

373 Open Communications 19—Advanced Endoscopy (9:42 AM — 9:47 AM)

Outcomes of Long-Acting Reversible Contraception Use in an Academic Medical Center

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Study Objective: To describe women choosing long-acting reversible contraception (LARC), as well as the duration of use, reasons for discontinuation and subsequent contraceptive methods.

Design: Retrospective cohort study.

Setting: Academic, urban medical center.

Patients: 1236 women who had a LARC device placed for contraception from 2006 through 2011.

Measurements and Main Results: Of 938 (75.9%) women with a LARC device and ≥ 1 month follow up, 93.9% had intrauterine devices (IUD), (18.4% Cu 380t and 75.5% LNG-IUS), and 6.1% had implantable rods. The median age was 32.1 (27.1–37.0) years and median body mass index was 26.3 (23.2–31.6) kg/m²; 29.6% were African-American, 45.7% were Caucasian, and 13.6% were Hispanic.

By 1 month, 5.3% of IUDs were expelled/discontinued and 0.0% of implants were discontinued. By 1 year, of 748 women with follow up, the continuation rate was 72.6% for IUDs and 66.0% for implants. Of those with follow up for 2 years (67.4% of 938 women), continuation rates were 50.6% for IUDs and 48.7% for implants. By 4 years, 50.7% of women had follow up and 15.7% of IUDs were still in place. At one year, the primary reason for discontinuation was abdominal or pelvic pain (23.6%) for IUDs and bleeding pattern (62.5%) for implants. The most common contraceptive method used after discontinuing LARC was another LARC (IUD: 20.3% and implant: 6.6%) followed by no contraception (12.7%).

Conclusion: A strength of our study is the use of documented LARC data, rather than patient report. Half of LARC devices placed for contraception

BEAM DIVERGENCE OF THE CO₂ LASER

