**Autofluorescence Endoscope Detects Endometriosis**

*BY ROBERT FINN*  
San Francisco Bureau

**SANTA MONICA, CALIF.** — Hysteroscopy is the most accurate tool for evaluating abnormal uterine bleeding, the technique can cause the intraperitoneal spread of malignant endometrial cells. This has raised concerns that hysteroscopy might be responsible for a worse prognosis in women with endometrial cancer.

But in a poster presentation at the biennial meeting of the International Gynecologic Cancer Society, Dr. A. Ben Arie and colleagues found no evidence that hysteroscopy was associated with an increase in endometrial cancer recurrences.

The retrospective study involved 392 women provisionally diagnosed with stage I endometrioid adenocarcinoma at five medical centers in Israel. Dr. Ben Arie of Kaplan Medical Center, Rehovot, Israel, and colleagues examined the women’s medical records, retrospectively reviewed rates of diagnosis, histologic type, grade and stage of the disease, and the patient’s outcome.

Three different diagnostic methods were employed in the women—25% had an endometrial biopsy, 49% had uterine curettage, and 26% had hysteroscopy. Endometrial adenocarcinoma was found in 88.5% of the women, and the other 11.5% had uterine serous papillary cancer, clear cell cancer, or small cell cancer. The cancer was stage I in 81% of the women, stage II in 2% of the women, and stage III in 17% of the women.

At a mean follow-up time of 55 months (range 12-233 months), recurrences were found in 5% of the women who had hysteroscopy, 4.7% of the women who had curettage, and 13.1% of the women who had endometrial biopsy. There was no statistically significant difference in the recurrence rate among the three diagnostic methods.

The investigators concluded that hysteroscopy was not implicated in the assessment of abnormal uterine bleeding.

—Robert Finn

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**Use of Ultrasound for Endometrial Cancer Screening Is Weighed**

*BY JEFF EVANS AND HEIDI SPLETE*  
Senior Writers

**LAS VEGAS** — An endoscopic device that has been used to detect lesions in the bladder and lung was able to detect unusual and inconspicuous endometrial lesions during laparoscopy that cannot be seen under white light. Dr. Steven F. Palter said in his award-winning presentation at the annual meeting of the American Association of Gynecologic Laparoscopists.

Dr. Palter and his colleagues conducted a pilot study using the D-Light system to detect lesions in patients suspected of having endometriosis because of pelvic pain or infertility. All suspected lesions were biopsied and excised for pathologic confirmation. Eight of 10 women were diagnosed with endometriosis, and 34 biopsies were reviewed.

In contrast to the classical dark, black, hemosiderin-like endometrial lesions that can be seen with normal white light, there are subtle and atypical clear, red, and white endometrial lesions with high metabolic activity that are now recognized as earlier forms of the disease. These atypical forms are found in most patients. The new autofluorescence endoscope system could improve the ability to see these lesions and render their detection less dependent on the ability and experience of the user, he said.

Overall, 79% of the lesions diagnosed with autofluorescence were confirmed to be endometriosis. And the new technique revealed additional lesions in 75% of the patients who had endometriosis. As a result, 10 additional biopsies were taken, and 90% of these new lesions were confirmed.

“These 5 of 6 patients with suspected additional disease were confirmed,” Dr. Palter said. In other words, the autofluorescence technology identified additional disease in 62.5% of the patients studied.

“Our pilot study demonstrated the ability to visualize the endometriosis, and further studies are ongoing on clinical outcomes,” noted Dr. Palter, medical and scientific director of Gold Coast IVF, Syosset, N.Y. He disclosed that he serves as a consultant to Karl Storz Endoscopy America, which makes the D-Light system.

“T was the first complete use of the system in the pelvis without drug dyes for the diagnosis of endometriosis in the United States,” said Dr. Palter. “Further studies are obviously required to determine the clinical outcome of pain-free survival in patients who undergo a more complete excision of diseased tissue as a result of the imaging system.

The D-Light system has not been approved for pelvic use by the Food and Drug Administration, but it received IRB approval for the study. It’s not yet known whether autofluorescence endoscopy will provide enough information on the depth of the lesion to know whether ablative or surgical excision will be the most appropriate treatment, he said.

In regular endoscopy, white light is used. The light is filtered from white into a narrower, blue range (B). Reflected blue light is filtered; endometrial lesions may appear dark blue if they block the green background fluorescence, now visible (C).

In regular endoscopy, white light is used (A). The light is filtered from white into a narrower, blue range (B). Reflected blue light is filtered; endometrial lesions may appear dark blue if they block the green background fluorescence, now visible (C).

An autofluorescence endoscope differs from a regular endoscope by the use of two additional colored filters. It’s not yet known whether autofluorescence endoscopy will provide enough information on the depth of the lesion to know whether ablative or surgical excision will be the most appropriate treatment, he said.