

## Why I don't recommend endometrial ablation

Endometrial ablation is a major operative procedure that:

- **Is ineffective** because, according to all research, 40% will ultimately still need a hysterectomy, one third have no change in bleeding and two thirds have no change in pain.
- **It does not prevent the most common gynecological cancer:** endometrial cancer, but it may obscure the early diagnosis of it, preventing or delaying spotting by the intended internal scarring. In fact, distant and fatal spread of endometrial cancer has been reported because the cancer can be trapped within the scarring, and escape only through lymphatic or vascular spread. Finally, the typical woman who has excessive bleeding, an overweight woman with excess estrogen in her blood) is the same woman at risk for uterine cancer.

### SELECTED REFERENCES

Jarrell A, Olsen ME. Patient satisfaction with thermal balloon endometrial ablation. A retrospective review. *J Reprod Med.* Aug 2003;48(8):635-636.

**OBJECTIVE:** To determine overall patient satisfaction with the balloon endometrial ablation procedure in women with menorrhagia. **STUDY DESIGN:** Thirty-one women in a university hospital underwent thermal balloon endometrial ablation in the year 2000. Of these, 3 were lost to follow-up. Twenty-eight women were called and asked to participate in a survey that quantified overall satisfaction with the procedure as well as change in menstrual flow and menstrual pain. Women were asked if any further medical or surgical therapy was required to control the bleeding. All patients participated in the study and stated that they underwent the procedure secondary to "heavy bleeding." All operative reports were reviewed and contained menorrhagia, menometrorrhagia or dysfunctional uterine bleeding in the preoperative diagnosis. **RESULTS:** A total of 57% of women reported overall satisfaction with the endometrial ablation procedure, **14% were very dissatisfied**, and 4% were neutral. Fifty-seven percent of women reported no bleeding or very decreased bleeding following the procedure, while 11% had slightly decreased bleeding. **Thirty-two percent experienced no change**, 43% reported decreased menstrual pain, and **57% had no change in their pain. Thirteen of 28 women underwent subsequent hysterectomy. CONCLUSION: Less than 60% of women reported satisfaction with balloon endometrial ablation, and 40% underwent hysterectomy within 1 year of it.**

Agostini, A., L. Cravello, et al. (2001). "Risk of discovering endometrial carcinoma or atypical hyperplasia during hysteroscopic surgery in postmenopausal women." *J Am Assoc Gynecol Laparosc* 8(4): 533-5.

**STUDY OBJECTIVE:** To assess the risk of diagnosing endometrial carcinoma or atypical hyperplasia in tissue resected during hysteroscopy performed for intrauterine pathology presumed benign in postmenopausal women. **DESIGN:** A single-center prospective study (Canadian Task Force classification II-2). **SETTING:** Department of Gynecology, La Conception Hospital, Marseille,

France. PATIENTS: Three hundred twenty-five women with intrauterine pathology, presumed benign, causing postmenopausal bleeding or bleeding related to hormone replacement therapy. INTERVENTION: All women had an endometrial biopsy after diagnostic hysteroscopy to exclude endometrial carcinoma or atypical hyperplasia. Then they underwent hysteroscopic surgical resection (203, 62.5%) or endometrial ablation (122, 37.5%). MEASUREMENTS AND MAIN RESULTS: Two cases each (0.6%) of endometrial carcinoma and endometrial atypical hyperplasia were discovered that were missed by preoperative evaluations. CONCLUSION: **Outpatient hysteroscopy and endometrial biopsy do not eliminate the finding of carcinoma or endometrial atypical hyperplasia, as these disorders may be discovered during hysteroscopic surgery.**

Brooks-Carter, G. N., M. A. Killackey, et al. (2000). "Adenocarcinoma of the endometrium after endometrial ablation." *Obstet Gynecol* **96**(5 Pt 2): 836-7.

BACKGROUND: Endometrial ablation is a relatively new technique for treating abnormal uterine bleeding not associated with malignancy. Long-term outcome data after endometrial ablation are limited, and incidence of endometrial adenocarcinoma after ablation is unknown. CASE: A 55-year-old black woman who had endometrial ablation for abnormal uterine bleeding after excluding uterine cancer presented 5 years later with similar symptoms and a histologic diagnosis of well-differentiated adenocarcinoma of the uterus. She refused surgery and had radiation treatment for probable stage I endometrial adenocarcinoma. CONCLUSION: It is unlikely in this high-risk patient that the endometrial ablation masked an undetected malignancy or delayed the diagnosis. **Given the interval, the adenocarcinoma might have occurred de novo.**

Colafranceschi, M., S. Bettocchi, et al. (1996). "Missed hysteroscopic detection of uterine carcinoma before endometrial resection: report of three cases." *Gynecol Oncol* **62**(2): 298-300.

Endometrial ablation or resection using hysteroscopy appears to be an effective treatment for menorrhagia resistant to medical therapy. Three patients with **endometrial adenocarcinoma missed in the preoperative hysteroscopic and histological assessment and subjected to endometrial resection were collected in a multicenter study.** One case was an early adenocarcinoma in the background of late proliferative endometrium in a 39-year-old woman. In the other two patients, ages 51 and 68, the adenocarcinoma developed in a polyp in a background of simple hyperplasia. Since hysteroscopy with endometrial biopsy might not be able to exclude the presence of an early intrauterine cancer, appropriate selection and accurate evaluation of patients are imperative before ablative surgery. **Endometrial resection is preferred over endometrial laser ablation since it provides additional tissue for histologic examination.**

Horowitz, G. M., S. Christensen, et al. (2000). "Postablative risk of endometrial carcinoma in New Zealand white rabbits given high-dose estrogen." *J Reprod Med* **45**(7): 553-6.

**OBJECTIVE:** To follow a population at high risk for endometrial carcinoma after endometrial ablation, to determine if ablation alters the incidence or detection of endometrial pathology. **STUDY DESIGN:** The animal model included 33 New Zealand white rabbits. Of this cohort, 17 underwent surgical ablation of the endometrium via laparotomy, while 16 served as controls. Vaginal bleeding was assessed with monthly cotton swab examinations as well as daily observation of the subjects. All animals received unopposed estrogen for 18 months prior to necropsy. **RESULTS:** No animal in either arm of the study demonstrated vaginal bleeding. Two rabbits from the ablation group and three controls showed histologic evidence of atypical endometrial hyperplasia or adenocarcinoma ( $P > .20$ ). One additional animal from each group had hyperplasia without atypia. **CONCLUSION:** **This animal model suggests that endometrial ablation does not decrease the risk of endometrial carcinoma in patients at high risk of developing endometrial pathology. Detection of hyperplasia or carcinoma in such a population may prove difficult due to the absence of traditional signs of endometrial abnormalities.**

Horowitz, I. R., P. R. Copas, et al. (1995). "Endometrial adenocarcinoma following endometrial ablation for postmenopausal bleeding." *Gynecol Oncol* **56**(3): 460-3.

A case of metastatic adenocarcinoma of the endometrium following endometrial ablation is described. A discussion of the development and evolution of endometrial ablation procedures is presented. Recommendations for patient selection and postablation surveillance are suggested. The authors believe this case report to be the third described in the literature. (Background. A case of endometrial adenocarcinoma developing after transcervical endometrial ablation with a resectoscope was recently reported (A. B. Copperman, A. H. DeCherney, and D. L. Olive, *Obstet. Gynecol.* 82, 640-642 (1993)). It is recognized that functional residual islands of endometrial tissue remain in both symptomatic and asymptomatic patients following ablation. There is only limited experience using endometrial ablation in postmenopausal patients and in others at high risk for endometrial cancer. Case. **A patient presented who developed metastatic adenocarcinoma of the endometrium after endometrial ablation for postmenopausal bleeding.** Conclusion. With endometrial ablation procedures, the potential exists for missed areas or buried nests of functional endometrial tissue that may later undergo malignant transformation or have already become metaplastic and invaded the myometrium. Therefore, close postoperative surveillance, including thorough evaluation of postoperative bleeding, is indicated. **Further studies with long-term follow-up are needed in order to define the safety and efficacy of endometrial ablation in the high-risk patient.**

Margolis, M. T., L. D. Thoen, et al. (1995). "Asymptomatic endometrial carcinoma after endometrial ablation." *Int J Gynaecol Obstet* **51**(3): 255-8.

Endometrial ablation has been recently introduced as a surgical alternative to hysterectomy for the treatment of dysfunctional uterine bleeding. The procedure itself is reasonably safe. However, if occult endometrial cancer is present before the procedure and is not detected, it may be more difficult to diagnose later.

Endometrial cancer may also arise de novo from missed endometrial tissue. Two cases of endometrial cancer following endometrial ablation have been reported, but its overall incidence is unknown. A 58-year-old woman was treated with endometrial ablation for dysfunctional uterine bleeding. Three years later she underwent hysterectomy and Marshall-Marchetti-Krantz procedure for urinary incontinence; incidental, asymptomatic endometrial adenocarcinoma was discovered. The final pathology was grade 1 adenocarcinoma, invading more than 50% of the myometrium (FIGO stage Ic). **Endometrial cancer may occur following endometrial ablation and it may be asymptomatic. Careful patient selection and close follow-up are essential.**

Perez-Medina, T., J. Bajo-Arenas, et al. (2003). "Endometrial intraepithelial neoplasia diagnosed at endometrial resection." *J Am Assoc Gynecol Laparosc* **10**(4): 542-4.

The literature has no reported cases of isolated endometrial intraepithelial neoplasia found at endometrial resection. If endometrial cancer is occult it might not be detected at diagnostic hysteroscopy or during resection, especially if destructive techniques are used. A 51-year-old woman had history of menorrhagia, with diagnostic hysteroscopy showing benign functional endometrium and diagnosed as dysfunctional uterine bleeding. Endometrial resection was performed and the pathologic examination in one stripe of resected tissue found focal, isolated endometrial intraepithelial neoplasia. This case reinforces the importance of pathologic tissue examination after endometrial ablation. Care must be taken when performing second-generation nonhysteroscopic ablation techniques, as **even with direct visualization a premalignant lesion can be missed.**

Valle, R. F. and M. S. Baggish (1998). "Endometrial carcinoma after endometrial ablation: high-risk factors predicting its occurrence." *Am J Obstet Gynecol* **179**(3 Pt 1): 569-72.

Our purpose was to review reported cases of endometrial carcinoma after endometrial ablation and to evaluate high-risk factors predicting its occurrence. We present guidelines for the treatment of abnormal uterine bleeding unresponsive to medical therapy in this high-risk group of patients. Eight detailed reports on endometrial carcinoma after endometrial ablation were reviewed. The indications, methods of treatment, follow-up, and associated high-risk factors for endometrial carcinoma were analyzed. A focused list of high-risk factors for endometrial carcinoma was developed on the basis of the data collected. Guidelines were established to enable surgeons to minimize the risks of subsequent uterine cancer in women with abnormal uterine bleeding that is unresponsive to medical therapy (ie, candidates for ablation). **Women who had endometrial carcinoma develop after ablation had predictive high-risk factors for subsequent neoplasia, and all eventually underwent a hysterectomy.** Women with abnormal uterine bleeding and high-risk factors for endometrial carcinoma who did not respond to medical treatment may safely undergo endometrial ablation but must have a preablation biopsy indicating normal endometrium. Persistent hyperplasia unresponsive to hormonal therapy

should influence the selection of a hysterectomy. Careful screening of patients before undergoing endometrial destructive procedures is prescient because minimally invasive, nonhysteroscopic ablative techniques are now emerging.