POSTMENOPAUSAL BLEEDING

Postmenopausal bleeding is treated as if it were endometrial carcinoma until excluded. There are numerous causes of postmenopausal bleeding[1]: Endometrial atrophy (59%), endometrial polyps (12%), endometrial cancer (10%), endometrial hyperplasia (9.8%), hormonal effect (7%), and Cervical cancer (< 1%).

Endometrial cancer is the most common type of gynecological malignancy in the US. The incidence of endometrial cancer increases with menopause with 75% of cases occurring in post menopausal women. Of women with post menopausal bleeding, 10% have endometrial cancer. Alternatively, most cases of endometrial cancer come to attention secondary to post menopausal bleeding.

According to the American College of Obstetricians & Gynecologists (Committee Opinion 440), either endometrial biopsy or ultrasound can be used initially[2]. If ultrasound is elected, an endometrial stripe of less than or equal to 4 mm suggests endometrial sampling is not indicated. If endometrial biopsy is elected management is based on the results. Only is tissue is insufficient for interpretation must another modality be employed. In these cases transvaginal ultrasound is the option of choice.

Ultrasound evaluation of the endometrial stripe has been used to predict the need for pathologic evaluation of the endometrium for many years. Numerous studies have used >4 mm endometrial stripe thickness as the cut-off point to proceed with pathologic evaluation of the endometrium via either endometrial biopsy or with combined D&C and Hysteroscopy[3-5].

Although still controversial, some authors believe direct visualization through Hysteroscopy and D&C is more sensitive in detection of significant endometrial abnormalities based on recognition of focal lesions and therefore enhanced sampling after an abnormal focus of disease is located. Some authors believe endometrial biopsy is similarly sensitive and should be used in women with significant risk factors for anesthesia.

Recently controversy has arisen with respect to the true negative predictive value of the $\leq$ 4 mm cut-off point for observation embodied within ACOG Committee Opinion 440. Data at the 2011 Annual Meeting of the Society of Gynecologic Oncologists makes clear that ultrasound can never completely exclude malignancy in women with postmenopausal bleeding[6]. In a retrospective study of 250 postmenopausal women with endometrial cancer, forty percent had endometrial thickness of < 5 mm. At Desert Women's Care we believe persistent bleeding, even in the presence of a thin endometrium should be adequate reason for sampling the endometrium.

Definitive management alternatives for postmenopausal bleeding are based on whether premalignant or malignant endometrium is discovered on sampling of the endometrium.

Premalignant lesions of the enometrium are classified as hyperplasia. The risk of developing malignancy is based on the degree of cellular abnormality identified.

RISK OF MALIGNANCY —

Simple hyperplasia without atypia --	1%
Complex hyperplasia without atypia --	3%
Simple hyperplasia with atypia--	8%
Complex hyperplasia with atypia--	29%

Risk of cancer—

The risk is 10 fold higher with unopposed estrogen therapy. The risk of progressing to cancer is elevated in obesity, diabetes, chronic anovulation, hypertension and heridary non-polyposis colorectal cancer (Lynch syndrome).

Treatment—

Treat with depo provera is recommended for three to six months. The response rate to progestins is highest in women without atypia and with therapy of at least 12 to 14 days per month. In a representative example, a series of 376 women with varying degrees of endometrial hyperplasia treated with a progestin for 7, 10, or 13 days each month for three to six months reported complete regression in 81, 98, and 100 percent of patients, respectively[7].

Endometrial hyperplasia may also be treated with a levnorgestrel containing IUD.

Follow Up—

Repeat endometrial biopsy three to six months

Additional information can be found at WebMD, UpToDate or similar, lay accessible, websites.

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