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## Evaluation and Management of the Perimenopause; Alternatives to Estrogen Therapy for the Postmenopausal Woman

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# Chapter 1—Evaluation and Management of the Perimenopause

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## I. INTRODUCTION

Menopause is defined as the permanent cessation of menses secondary to ovarian follicle depletion or early ovarian removal. However, menses rarely stop suddenly and so the transition is heralded by menstrual irregularity before cessation. The hormonal changes that proceed to menopause typically occur during a period of several years, and this transition is termed *the perimenopause*. The U.S. Census Bureau reports that more than 30 million women are now perimenopausal or postmenopausal and that another 6 million will reach menopause in the next 10 years.<sup>1</sup>

It is crucial that healthcare providers discuss with patients the short-term and long-term implications of hypoestrogenism that begins during the perimenopausal transition. It is becoming evident that hormone replacement therapy (HRT) is beneficial in preventing the effects of estrogen deficiency. These benefits include decreasing the risk of osteoporosis and cardiovascular disease, as well as improving menopausal symptoms such as hot flashes, vaginal dryness, and emotional fluctuations. Frequently, HRT is not initiated until the cessation of menses; however, patients may benefit from instituting treatment during the peri-

menopause when hypoestrogenic symptoms may be quite subtle. Oral contraceptive pills (OCPs) are also beneficial during the perimenopause. It is critical for healthcare providers to understand the evaluation and management of perimenopausal patients in order to provide timely and effective treatment of perimenopausal symptoms while providing long-term health maintenance.

## II. CASE PATIENT I PRESENTATION

Patient 1 is a 44-year-old, unmarried, Caucasian woman who presents for her annual examination. She has noticed the gradual onset of occasional menstrual irregularity. Her menstrual cycle length has decreased from 28 days to 23–24 days during the past 6 months. She denies any episodes of heavy bleeding or any changes in her health. She reports occasional “hot flashes” but otherwise feels quite well. She denies any substantial sleep disturbances, social stressors, or changes in weight or libido. She is occasionally sexually active with the same partner but is not interested in achieving pregnancy. Her medical history and family history are unremarkable, and she is a nonsmoker. Her mother reached menopause at 47 years of age. Patient 1 is bothered by