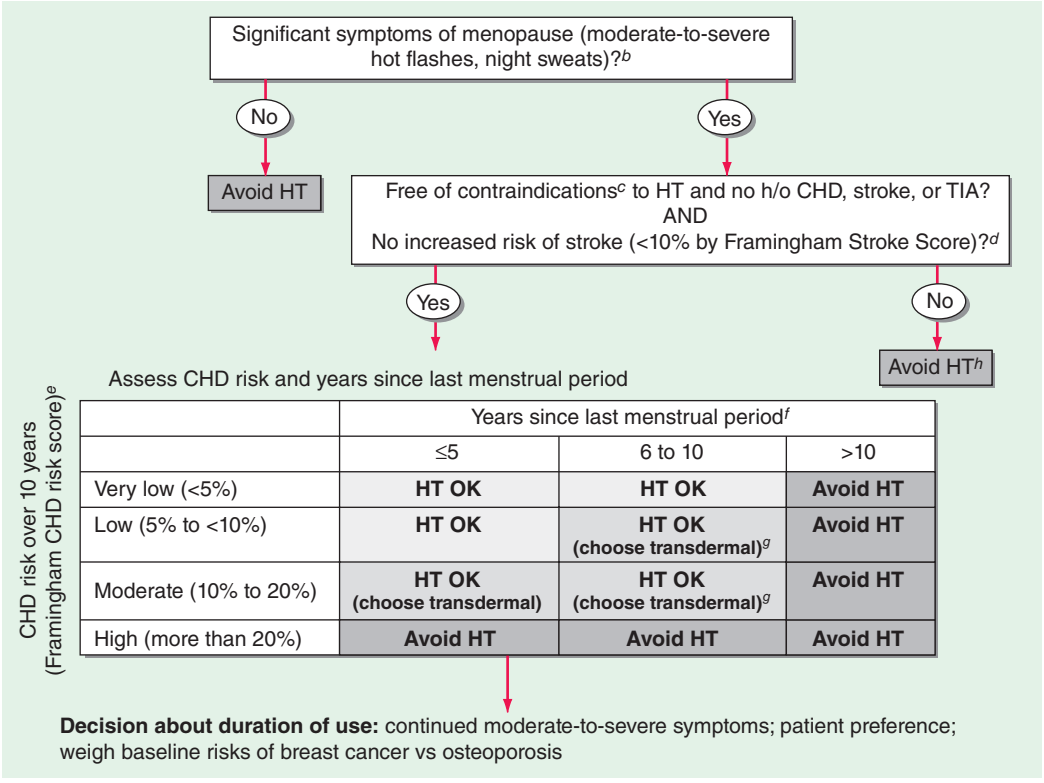

FIGURE 413-3 Chart for identifying appropriate candidates for postmenopausal hormone therapy (HT).[a] [a]Reassess each step at least once every 6–12 months (assuming the patient's continued preference for HT). [b]Women who are at high risk of osteoporotic fracture but are unable to tolerate alternative preventive medications may also be reasonable candidates for systemic HT even if they do not have moderate to severe vasomotor symptoms. Women who have vaginal dryness without moderate to severe vasomotor symptoms may be candidates for vaginal estrogen. [c]Traditional contraindications are unexplained vaginal bleeding; active liver disease; history of venous thromboembolism due to pregnancy, oral contraceptive use, or an unknown etiology; blood-clotting disorder; history of breast or endometrial cancer; and diabetes. Oral HT should be avoided but transdermal HT may be an option (see *g* below) for other contraindications, including high triglyceride levels (>400 mg/dL); active gallbladder disease; and history of venous thromboembolism due to past immobility, surgery, or bone fracture. [d]Ten-year risk of stroke, based on Framingham Stroke Risk Score (RB D'Agostino et al: Stroke risk profile: Adjustment for antihypertensive medication. The Framingham Study. Stroke 25:40, 1994), as modified by JE Manson, SS Bassuk: *Hot Flashes, Hormones & Your Health*. New York, McGraw-Hill, 2007. [e]Ten-year risk of CHD, based on Framingham Coronary Heart Disease Risk Score (Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults: JAMA 285:2486, 2001), as modified by JE Manson, SS Bassuk: Hot Flashes, Hormones & Your Health. New York, McGraw-Hill, 2007. [f]Women >10 years past menopause are not good candidates for initiation (first use) of HT. [g]Avoid oral HT. Transdermal HT may be an option because it has a less adverse effect on clotting factors, triglyceride levels, and inflammation factors than oral HT. [h]Consider selective serotonin or serotonin–norepinephrine reuptake inhibitor, gabapentin, clonidine, soy, or another alternative.
Abbreviations: CHD, coronary heart disease; h/o, history of; TIA, transient ischemic attack. *(Adapted from JE Manson, SS Bassuk: Hot Flashes, Hormones & Your Health. New York, McGraw-Hill, 2007. Copyright © 2007 by the President and Fellows of Harvard College. All rights reserved.)*

414 Infertility and Contraception

Janet E. Hall

INFERTILITY

DEFINITION AND PREVALENCE

Infertility has traditionally been defined as the inability to conceive after 12 months of unprotected sexual intercourse. In women who ultimately conceived, pregnancy occurred in ~50% within 3 months, 75–82% within 6 months, and 85–92% within 12 months. The World Health Organization (WHO) considers infertility as a disability (an impairment of function) and thus access to health care falls under the Convention on the Rights of Persons with Disability. Thirty-four million women, predominantly from developing countries, have infertility resulting from maternal sepsis and unsafe abortion. In populations <60 years old, infertility is ranked the fifth highest serious global disability. In the United States, the rate of infertility in married women age 15–44 is 6% based on the National Survey of Family Growth, although prospective studies suggest that it may be as high as 12–15%. The infertility rate has remained relatively stable over the past 30 years in most countries. However, the proportion of couples without children has risen, reflecting both higher numbers of couples in childbearing years and a trend to delay childbearing. This trend has important implications because of an age-related decrease in fecundability: the incidence of primary infertility increases from ~8% between the ages of 18 and 38 to 25% and 30% between the ages of 35 and 39 and 40 and 44, respectively. It is estimated that 14% of couples in the United States have received medical assistance for infertility; of these, two-thirds received counseling, ~12% underwent infertility testing of the female and/or male partner, and 17% received drugs to induce ovulation.

CAUSES OF INFERTILITY

The spectrum of infertility ranges from reduced conception rates or the need for medical intervention to irreversible causes of infertility. Infertility can be attributed primarily to male factors in 25% of couples and female factors in 58% of couples and is unexplained in about 17% of couples (Fig. 414-1). Not uncommonly, both male and female factors contribute to infertility. Decreases in the ability to conceive as a