## Hormone replacement therapy: A closer look

More than 50 million women in the Unites States are older than age 45. The average American woman will live one-third of her life past menopause. The decision whether to undertake Hormone Replacement Therapy (HRT) is a complicated issue. Potential benefits and risks must be considered in light of each individual woman's medical history. Most women seek advice about HRT for symptomatic relief of menopausal syndrome. Common symptoms include hot flashes, night sweats, moodiness, depression, vaginal dryness, decreased sex drive and insomnia.

Osteoporosis prevention is a significant consideration; it's of particular importance for women with documented osteopenia or osteoporosis per baseline bone mineral density performed at or around the time of the menopause (cessation of menses for longer than 12 months). The most precipitous decline in bone mineral density usually occurs within one to three years after cessation of menses. One in six women will suffer a hip fracture secondary to osteoporosis. This carries with it a 5 percent to 20 percent mortality risk from complications such as pulmonary embolism and stroke. HRT can both improve bone density and reduce bone loss (even if it's initiated several years after the menopause). It confers a fracture reduction rate between 25 percent to 80 percent.

Cardiovascular disease prevention has become a topic of controversy since the Heart and Estrogen /progestin Replacement Study (HERS) was published (Hulley, S., Grady, D., Bush, T. et al. "Randomized trial of estrogen plus progestin for secondary prevention of coronary heart disease in postmenopausal women." JAMA 1998; 280:605-613). This showed an increased risk of cardiovascular events in certain women with specific manifestations of pre-existing heart disease. It had previously been shown in observational studies that HRT conferred a 40 percent to 50 percent reduction in the risk of coronary heart disease. The HERS trial is a complicated study that specifically addresses risk in women with pre-existing heart disease. The Women's Health Initiative is an ongoing study looking at the effects of HRT on heart disease, and breast and endometrial cancer. Unfortunately, this large, multicenter study will not conclude until 2005.

Potential risks of HRT include increased incidence of breast and endometrial cancers. All women should have current pap smears and mammograms before even considering initiating HRT. It is absolutely contraindicated in women with a personal history of hormone-related cancer, liver disease, history of DVT (deep vein thrombosis), history of pulmonary embolism or unexplained vaginal bleeding.

Relative contraindications include family history of hormone-related cancer, fibroids, migraine headaches and seizure disorder.

All patients need to have current pelvic and breast exams, PAP smears and mammograms both before undertaking treatment and regularly during the course of HRT.

Side effects of typical one-size-fits-all HRT such as Premarin, Provera and Prempro can include nausea, headaches and vaginal bleeding. (Vaginal bleeding should cease within several months of initiation of treatment and should be monitored by a gynecologist.) These side effects can sometimes be mitigated with the use of natural HRT. We use Bi-est and micronized progesterone, both of which are derived from soy. The human body produces three estrogens: estriol, estradiol and estrone. It's thought that estrone might be the particular estrogen responsible for the increased risk of hormone-related cancers with HRT. Bi-est, as the name implies, only combines two estrogens: estriol and estradiol.

In addition to replacing estrogen and progesterone, we seek to balance HRT with appropriate dosages of testosterone and DHEA. DHEA is an adrenal hormone that serves as a building block for testosterone. When DHEA and/or testosterone levels are too low, women frequently complain of low energy, low sex drive, joint achiness and poor mental alertness. Testosterone also may be an important adjunct to estrogen and progesterone when they are used in the prevention and treatment of osteoporosis.

With appropriate medical follow up, HRT can be an important part of a woman's treatment plan for both menopausal syndrome and osteoporosis. Because there are numerous considerations regarding risk factors, potential side effects, osteoporosis monitoring and optimization of menopausal syndrome management, dispensing and adjusting dosages of estrogen, progesterone, testosterone and DHEA should be part of an ongoing dialogue between patients and medical practitioners.