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Hormone Replacement Therapy By: James L. Holly, MD

(The following column represents Dr. Brent Bost's letter to his patients about hormone replacement therapy. I think his letter is balanced and helpful and wished to share it with our Your Life Your Health readers. James L. Holly, MD)

Recent press announcements have caused concern among our patients about hormone replacement therapy for menopause. A large, 10 year research study called the Women's Health Initiative (WHI) was halted early because of fear that the combination of Premarin (an estrogen) and MDPA (a progestin) might actually increase the risk of heart attack, stroke, blood clots, and breast cancer when started in women already in menopause. Fortunately, the risks of these problems are not terribly high. The preliminary data shows the following increase in risk for women in the study who took Premarin + MDPA over women who take any hormones.

Heart attacks	1/1,430 per year
Strokes	1/1,250 per year
Blood clots	1/555 per year
Breast Cancer	1/1,250 per year

To put these increases in risk in proper perspective, the risk of getting pregnant while taking birth controls pills is 1/1,000 per year. In other words, one woman will get pregnant out of 1,000 women taking the pill each year. Most women consider this a low risk for the benefit obtained. From the study, the added risk of a heart attack from taking estrogen + MDPA over no hormones at all is lower than the risk of getting pregnant on birth control pills. Similarly, the additional risk of developing breast cancer or having a stroke from taking the combination hormones replacements is lower than the likelihood of coming up pregnant on the pill. Only the risk of developing a blood clot is higher.

Preliminary data from the WHI study also shows that women who had a hysterectomy and are able to take Premarin alone; have no increased risk of any of the problems. This is additional proof that estrogen does not cause breast cancer. Therefore if the WHI study results are valid, the culprit in increasing these risks, however small they may prove to be, is probably the synthetic progestin MDPA, not the estrogen. Since all progestins are not the same in the way they impact heart, breast, and blood vessels, it is very possible that a different progestin would not have the same effects.

The benefits and risks of hormone replacement for women in menopause have been debated back and forth over the last 40+ years. A large volume of medical research has been done over that time and the majority of experts have generally agreed on the following ideas about hormone replacements:

- 1. Estrogen helps prevent heart disease - the exact way which estrogen prevents heart disease is unclear, but in multiple studies of women followed over long time frames (as long as 40 years in some studies), estrogen has been shown to be beneficial in preventing heart disease. Some recent studies have shown that once a woman already has heart disease, starting estrogen replacement won't help decrease the risk of further heart problems. It's too late to get the benefit from estrogen. The average age of women in the WHI study was 63 and the average age of menopause in 51. This means that at least half of the women in the study had been in menopause for at least 12 years. Perhaps, estrogen's ability to protect the heart goes away a few years after menopause begins and if estrogen isn't started early in menopause the benefit is lost forever. This is the case with osteoporosis. It may also be possible that once that potential benefit is gone, starting estrogen actually worsens the situation for the heart, probably through a different mechanism. This area definitely needs more study.
- 2. Estrogen prevents osteoporosis (thin bones) all research to this fact with certainty, even with WHI studies, as long as estrogen is started within 3-5 years of the start of menopause, bone mass can usually be preserved. There are other medicines that can also prevent the loss of bone in menopause, but no one doubts that estrogen can help stop osteoporosis for the vast majority of women.
- 3. Estrogen helps prevent hot flashes ("flashes"), night sweats, and mood changes associated with menopause no one seriously disputes this statement either. These symptoms tend to go away over 6-24 months after menopause begins, but can be quite aggravating for some women and may never go away completely without estrogen. Most women report simply "feeling better" on hormones. Although this benefit is hard to measures, it is still a very significant reason why women want to stay on hormone replacement.
- 4. Estrogen (and sometimes, testosterone) improves sexual responsiveness in menopausal women numerous studies have documented this benefit. Estrogens keep the vagina moist and pliable for intercourse. Women on

estrogen report more interest in sex, more energy for romance, and more pleasurable physical encounters than women who are not on hormone replacement.

5. Estrogen may also help prevent Alzheimer's disease, Macular Degeneration (a major cause of blindness in elderly women), and improve mental functioning – research suggests these are potential benefits of estrogen replacement in menopause. Further studies are currently underway to verify these possible benefits.

Unfortunately, no benefit comes without cost. Estrogen clearly causes an increased risk of uterine cancer. However, if progestin is added to the estrogen, the risk of developing uterine cancer actually falls below the risk of developing it on no hormones at all. In other words, the combination of estrogen-progestin protects against uterine cancer. That's why women who still have a uterus must take progestin, like MDPA, with their estrogen. Thankfully, there are other progestin's available should MDPA prove to be the cause of the problems found in the WHI study. Of course, women who had a hysterectomy do not need a progestin to receive estrogen replacement therapy.

To summarize what we actually know today:

- Estrogen clearly prevents osteoporosis, improves sexual responsiveness, and chases away the hot flashes, night sweats, and irritability of menopause.
- Estrogen most likely helps prevent heart disease in women, as long as it is started early in menopause. It may encourage further heart problems in women who already have heart trouble, and for this reason, should be used cautiously if started later in menopause.
- Estrogen must be used in combination with progestin for women who still have a uterus. Perhaps MDPA is not the best choice for a progestin, but the WHI study results have not been verified and analyzed enough to declare MDPA unsafe at this point.
- Estrogen and a progestin together may produce some increased risk of heart disease, breast cancer, blood clots, and stroke in selected patients. Exactly who is at risk and the exact level of risk, if any, is unclear at the present time.

In the final analysis, a woman must decide for herself the benefits she sees in hormone replacement, weigh those benefits against the possible risks, and come to the decision that's right for her. We, as women's healthcare physicians' will support her decision.

Remember, it is your life and it is your health.