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A REVIEW OF THE MOST RECENT EVIDENCE CONCERNING THE USE OF HORMONE REPLACEMENT THERAPY IN MENOPAUSE

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ABSTRACT:

Hormone replacement therapy, often known as HRT, is the method that has shown to be the most successful in treating the symptoms of oestrogen shortage. When hormone replacement therapy is personalised for each woman, the benefits to those women are maximized while the hazards are reduced. There are several HRT formulations, dosing schedules, and administration methods available today. The findings of studies that solely employ a single kind or route may not be applicable to all users for this reason. The choice to utilise hormone replacement therapy (HRT) is a personal one that should only be made by a woman after she has received accurate information and sound counsel from qualified medical experts. HRT should be offered to women who have early ovarian insufficiency, and these women should be advised to continue taking the medication until the average age of menopause, which is 51.4 years. Goals for educational pursuits to conduct an analysis of the most recent studies and the available information about the use of HRT in females. The use of the evidence in regard to the treatment of the symptomatic menopausal lady. In order to increase prescription confidence for HRT in the majority of symptomatic women. to get a comprehensive understanding of prescription in women along with its associated contraindications.

Keywords: breast cancer, cardiovascular disease, hormone replacement therapy, menopause, quality of life, thromboembolism

INTRODUCTION:

Menopause is the name given to the termination of the menstrual cycle, which happens spontaneously at a median age of 51.4 years in most women. 1 Vasomotor symptoms are rather prevalent and have been shown to react well to oestrogen replacement in appropriate levels. Do not mistake hormone replacement treatment (HRT), in which the oestrogen is akin to natural ovarian

production, with the strong ethinyl estradiol used in combination oral contraceptive regimens. HRT uses oestrogen that is similar to normal ovarian production. If a woman still has a uterus after menopause, it is imperative that she take a progestogen or micronized progesterone in order to reduce the risk of endometrial hyperplasia and cancer. Estradiol may be administered orally (micronised estradiol, estradiol valerate, estrone, estriol or conjugated equine estrogens), or transdermally (17b-estradiol). When treating localised symptoms, oestrogen may be used topically via the vaginal canal. Either in a sequential cyclical pattern or in a continuous combined treatment setting, the use of several progestogens in conjunction with estradiol is standard practise (CCT). Oral administration is the most common method of progestogen administration; transdermal use is limited to only two formulations. Along with oestrogen replacement, the levonorgestrel-releasing intrauterine device Mirena (Bayer Plc., Newbury, UK) has been granted a licence to be used in the UK for a period of four years. Tibolone is a synthetic oral steroid that has estrogenic, androgenic, and progestogenic effects. It is a potential candidate for hormone replacement therapy (HRT) in postmenopausal women. The function of more testosterone won't be discussed in this piece for obvious reasons.

Vasomotor symptoms are prevalent, affecting around 70 percent of women (severely impacting approximately 20 percent), and lasting for a median length of 5.2 years; however, they may remain for many more years in approximately 10 percent of women. The symptoms of menopause have a negative impact on one's quality of life. The most helpful treatment is hormone replacement therapy (HRT). Despite this, the risk–benefit ratio has long been a contentious topic of discussion. After the Women's Health Initiative published their findings, the number of women who used it dropped by 80 percent. According to the findings of some independent study, the persistently unfavourable attitude toward the use of HRT for the treatment of symptoms is not warranted.

THE WOMEN'S HEALTH INITIATIVE STUDY:

The impact of hormone replacement therapy (HRT) on cardiovascular outcomes in healthy postmenopausal women was the primary focus of the randomised controlled study that was intended to investigate this question. The ages of the participants ranged from 50 to 79 years. Those who had a hysterectomy were randomly assigned to receive either CEE alone or a placebo,

while women who still had their uterus were given either CEE in combination with medroxy progesterone acetate or a placebo. The same amount was given to patients of all ages, and alleviation from vasomotor symptoms was not the major focus of the study's end point evaluations. In point of fact, significant vasomotor symptoms were a requirement for elimination from the study. In 2003, the combined arm of the trial was terminated, and a press statement detailing the adverse effects seen was issued at that time. There was a report of an increase in cases of breast cancer, cardiovascular disease, stroke, and venous thromboembolism, but there was a decrease in the number of cases of fractures, bowel cancer, and diabetes. In the CEE-only arm of the study, which is still open, these adverse effects were not seen at any point. When treating older women in a clinical setting, it is standard practise to start them on a lower dosage. Giving HRT to women within 10 years after the menopause was related with less risks and a decrease in cardiovascular events (–6/10 000 women years), as indicated by the reanalysis of the Women's Health Initiative research in 2007. It was shown that administering HRT to women longer than 20 years after the menopause and 17 years after menopause for every 10 000 woman years increased the risk of adverse effects. The use of hormone replacement therapy (HRT) for the alleviation of menopausal symptoms during the early period of the transition to menopause is now referred to as "the window of opportunity" for therapeutic benefit. It was of special interest that the breast cancer risk was not found in the women who were in the CEE-only arm of the study, and at this time, a lot of attention is being devoted to the possibility that there are distinctions between the progestogens in terms of the impact they have on the breast.

PREMATURE OVARIAN INSUFFICIENCY:

Under the standards of industrialised countries, entering menopause before the age of 45 is considered to be premature. 19 Women who are diagnosed with premature ovarian insufficiency have an increased risk of developing cardiovascular disease and osteoporosis at an early age. It has also been shown that they have a lower chance of developing breast cancer in comparison to their colleagues who menstruate. It is believed that the risk of breast cancer associated with HRT usage in these women is not significantly higher than the risk associated with the general population for their age; nevertheless, the advantages of preventing long-term morbidity are considered to be much larger.

As a result, it is highly recommended that these women give HRT at least some thought, and that they do so up to the age of 50. Because HRT has been demonstrated to be effective in women of this age group, the use of bisphosphonates is not considered to be a first-line treatment22 for the prevention of osteoporosis in younger women. 20,21 Bisphosphonates are also not considered to be first-line treatment for osteoporosis in younger women. It is recommended that the WHO Fracture Risk Assessment Tool be examined.

HRT IN LOW-RISK WOMEN:

There are just a few women for whom hormone replacement therapy (HRT) is an absolute no-go. The worry of an elevated risk of breast cancer is at the forefront of most women's and doctors' minds. The risk that is linked with using HRT is much reduced in comparison to the risks that are associated with being overweight, drinking alcohol in moderation, or postponing one's first pregnancy until beyond the age of 35. 24 The absolute increase in the risk of breast cancer is six more instances per one thousand women for every five years of exposure to oestrogen and progestogens. This risk returns to the population risk after five years of cessation of exposure. 18 A trial of HRT for three months will enable a woman to evaluate her quality of life, determine whether HRT has been of benefit, and then decide on duration, having been made aware that the risk of breast cancer will be duration dependent. Once the risks have been explained and put into perspective, a woman will be able to decide whether or not HRT has been of benefit. In the event that a woman develops breast cancer while using HRT, there will be no negative impact on her likelihood of dying.

A complete history will shed light on any pre-existing medical conditions as well as any family history of cardiovascular disease or cancer. The physician will be able to use this information to determine the appropriate treatment plan, dosage, and delivery method. The measurements of body mass index and blood pressure taken at the beginning of treatment provide direction on the need of further inquiry. There is no need to have a mammography or breast exam before treatment, nor is there a need for a pelvic exam, cervical smear, or endometrial thickness assessment using a transvaginal scan. Before moving further with therapy, however, particular breast or abdominal symptoms will need to be explored. After starting hormone replacement therapy (HRT), a woman shouldn't be forced to stop taking it all of a sudden; rather, she should be weaned off the

medication gradually. There are a few people who continue to display symptoms even after they have been weaned. The choice to continue or resume hormone replacement therapy is one that should be based on the quality of life.

Table 1. Simplifying decision selection of HRT in low-risk women

Condition	Type of HRT
Perimenopausal women	Continuous estrogen/cyclical progestogen
Hysterectomised women	Estrogen only
Women with subtotal hysterectomy	Estrogen only if no endometrium identified histologically at the lower resection margin CCT should be used if endometrium seen
Endometrial ablation	Either cyclical or CCT ?combined continuous
Progestogen-sensitive	Mirena plus systemic estrogen Micronised progesterone
Early menopause	May require higher estrogen dose
Older woman	Start with lowest dose and adjust
Potential malabsorption	Non-oral route
Postmenopausal, low libido	Try tibolone as first choice
Non-responders to standard treatment: young with surgical induced menopause	Subcutaneous implants of estrogen*

*Implants only available in some clinics

In the perimenopausal stage, women may experience the beginnings of menopausal symptoms (last period within the past 12 months). It is recommended that these women begin using sequential (cyclical) HRT (that is, continuous oestrogen with progestogen for 12–14 days per month) in order to prevent needless investigations of unexpected bleeding. If periods occur fairly often, hormone replacement therapy (HRT) should begin with the next bleed; however, if periods occur seldom (more than three months apart), HRT may be started without first waiting for a period to occur. In situations like these, the woman should be advised that her initial withdrawal bleed at the end of the first cycle may be heavier than usual, but that her following periods will return to their normal frequency. It is also important to let the lady know that this course of treatment does not prevent pregnancy. The topic of birth control during perimenopause will not be addressed in this article.

THROMBOSIS RISK:

The risk of venous thromboembolism (VTE) that is related with the use of HRT is highest during the first year of treatment and gradually decreases after that. It's possible that the dosage, kind, and mode of administration you choose all have a role in the risk. It's possible that the progestogen mixture has a role as well. Oral HRT is linked with a higher risk of venous thromboembolism (VTE) compared to transdermal HRT; however, smaller dosages of both methods at the

beginning of treatment may be less likely to increase this risk. When it comes to treating some medical disorders, transdermal is the method of choice.

VTE is already more likely to occur in women who lead a sedentary lifestyle, have excess body fat, and smoke cigarettes. In Europe, women aged 50–59 years have a baseline risk of 5/1000, which increases to 7/1000 for 5 years of oestrogen just and 12/1000 for 5 years of oestrogen and progestogen combined.

NON-HORMONAL TREATMENTS:

For a trial period of three to four months, women who require treatment may be offered clonidine, selective serotonin reuptake (if not on tamoxifen), selective noradrenaline reuptake inhibitors (unlicensed indication for vasomotor symptoms), or gabapentin, along with suggestions for self-help. If this strategy does not prove successful, we may go on to the next possibility. When all other recommended alternatives to medicine have been exhausted, it is appropriate to have a conversation regarding the patient's quality of life and chances of survival. It is suggested that the patient discuss her desire to attempt HRT with her oncologist and other care providers in the event that she has these desires. Every woman diagnosed with breast cancer will respond differently to news of her diagnosis and outlook on treatment. Some people will be against making any decisions when there is no clinical data proving their safety, while others will be so eager to go on with their life that they will believe the time they have left should be filled with great experiences rather than ones they have to suffer through. The first group will want to avoid hormone replacement therapy (HRT), while the second group will want to examine it for reasons related to quality of life. It is helpful to ask the patient how she would respond and who she would blame if the cancer were to reoccur while she was taking HRT. This will allow the patient to make an informed decision. It's possible that the response she offers will show how she thinks about the conundrum.

CONCLUSION:

The usage of HRT is beneficial for women who are experiencing symptoms. There are no medical conditions that should absolutely not be treated with hormone replacement therapy (HRT). No physician who treats women who are experiencing menopausal symptoms should be reluctant about addressing the risks and advantages of HRT with their patients or be unwilling to give a trial of

therapy that is suitable. It is important that women who have relative contraindications be given the opportunity of speaking more about this topic with a menopausal expert. The British Menopause Society, the Royal College of Obstetricians and Gynecologists, and the Faculty of Sexual and Reproductive Healthcare are all excellent resources for guidance and continuing education for medical professionals who lack experience with the various kinds of HRT and the various ways they are administered.

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