

Bioidentical Hormone Replacement Therapy (BHRT): A Women's Health Nurse Practitioner's Perspective on Bioidentical Hormones

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Abstract: *This article provides an in-depth exploration of Bioidentical Hormone Replacement Therapy BHRT from a Women's Health Nurse Practitioner's perspective. It delves into the symptoms of menopause, the benefits and risks of BHRT, and the importance of personalized treatment. The paper aims to educate nursing providers on the integration of BHRT into their practice, highlighting the significance of safe and effective hormone management. By drawing on the extensive experience of Dr. Stefanie Ann Varela, the article emphasizes the transformative impact of BHRT on women's health.*

Keywords: Bioidentical Hormone Replacement Therapy, Menopause, Women's Health, Hormone Imbalance, Nursing Practice

Bioidentical Hormone Replacement Therapy (BHRT): A Women's Health Nurse Practitioner's Perspective on Bioidentical Hormones

Menopause is a real phenomenon. You may not visibly notice the symptoms, but you certainly feel them. From vaginal dryness, hot flashes, brain fog, joint pain, weight gain, fatigue, and low libido to mood swings, these are just a few of the symptoms that a woman may experience. The good news is that we no longer have to endure these challenges alone. Bioidentical hormone replacement may offer a solution. Believe me, there are women suffering from these distressing symptoms as I write.

Bioidentical Hormone Replacement Therapy (BHRT) is a form of restorative therapy that can profoundly impact the overall health of patients (Paoletti, 2015). However, controversial issues have arisen regarding proper dosage, the absence of FDA regulation, FDA concerns, and the risk of compounded pharmacies not adhering to the same Westernized pharmaceutical standards (BHRT Academy, 2022). Despite varying beliefs about the use of Bioidentical Hormones, this method of practice is here to stay.

So, what are Bioidentical Hormones? Bioidentical hormones are hormones with the same chemical structure as those naturally produced in our bodies, making them biologically identical to our body's natural hormone structure (BHRT Academy, 2022). When administered correctly and safely, providers can address hormonal imbalances, restore equilibrium, and help individuals achieve the highest possible level of health (Dr. Uzzi Reiss MD, 2001, pg xvi), ultimately contributing to the restoration of a woman's sense of self.

A staggering 1.3 million women go through menopause each year in the United States. With increased life expectancy, women can live up to one third of their lives in a postmenopausal state [2]. Presently, the widely accepted and common approach to addressing menopausal symptoms involves prescribing antidepressants and anxiolytic medications for women [5]. Despite conflicting data on the risks versus benefits of Hormone Replacement Therapy (HRT) and BHRT, a personalized and individualized

approach can assist in evaluating whether the benefits outweigh the risks.

HRT has demonstrated positive effects on anxiety, depression, cognitive function, vasomotor symptoms, sleep, vaginal dryness, sexual health, and an overall sense of well-being [3]. Safely optimizing hormones enhances the quality of life by improving mood, energy, sleep, sexual function, and brain health for the patient. While both HRT and BHRT involve the use of exogenous hormones, BHRT's technology enables the composition of hormones that precisely match the molecular structure of the individual's endogenous hormones.

Implementing a structured and standardized policy and procedure will inevitably provide providers with guidelines on diagnosing and managing menopausal symptoms related to hormone deficiencies experienced by women. It is essential to approach the use of hormones with consideration and care, focusing on treating women who specifically seek out providers for BHRT/HRT rather than advertising hormones.

The definition of menopause is the absence of menses for one year. Symptoms of menopause result from hormonal shifts or a lack of hormones and have been associated with various risk factors, including inflammation, cognitive decline, decreased bone density, increased insulin and cortisol levels, and a rise in blood pressure. About 75% of women report vasomotor symptoms, such as hot flashes, night sweats, migraines, brain fog, and palpitations. Additionally, 60% of women experience urogenital symptoms, and 45% report psychogenic symptoms [2]. These symptoms encompass atrophic vaginitis, mood swings, weight gain, brain fog, hair loss, and difficulty coping with activities of daily living (ADLs).

This paper aims to introduce or reintroduce bioidentical hormones to the nursing provider community. It is crucial to note that while this paper provides information on the benefits of hormones, it does not replace one's nursing knowledge. Instead, it encourages the inclusion of BHRT courses from respected institutions such as BHRT Academy, SEED SSRP, and the American Academy of Anti - aging Medicine (A4M). The purpose of this article is to educate healthcare providers,

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particularly Women's Health Nurse Practitioners, on the safe and effective use of Bioidentical Hormone Replacement Therapy BHRT to manage the symptoms of menopause, thereby improving patient outcomes and quality of life.

BHRT courses from these institutions have revolutionized providers' perspectives on the use of hormones, echoing the transformative experience of Dr. Varela. With 35 years of experience in women's health, Dr. Varela's journey from a medical assistant to a Nurse Practitioner and then to a PhD Provider has been marked by a profound connection to BHRT. These programs ignited a passion within her, challenging previously held beliefs and shedding light on potentially misleading information about hormones. Driven by a commitment to education, she continues to advocate for the necessity of BHRT intervention, acknowledging that the scientific understanding of hormones has evolved over time.

This paper contributes to the development of knowledge and understanding derived from Dr. Varela's journey, emphasizing the integration of BHRT into her practice. It serves as a testament to the transformative impact that a deeper understanding of bioidentical hormones can have on healthcare practitioners and, ultimately, patient care. The significance of this article lies in its potential to bridge the gap in knowledge and practice regarding Bioidentical Hormone Replacement Therapy BHRT among healthcare providers. By offering evidence based insights

Bioidentical Hormones – Plant - Based Medicine

Who doesn't appreciate the wonders of plants? Bioidentical hormones are derived from yam or soy, from which estradiol, estriol, progesterone, and testosterone are synthesized (Paoletti, 2015). Diosgenin, another crucial molecule, is extracted from yam or soy to produce these hormones (Myra, 2023). The medicinal properties of yam and soy plants offer a natural means to restore a woman's body. Notably, bioidentical hormones maintain a biological identity with our body's chemical hormone structure (BHRT Academy, 2022).

Hormones, as substances produced by the body, travel through tissue fluid to stimulate specific cell actions. Operating as chemical messengers, hormones deliver messages to receptors, exerting a restorative effect (Paoletti, 2015). The use of plant - based sources for bioidentical hormones aligns with the body's natural processes, offering a holistic and potentially effective approach to hormone restoration.

Types of Hormones: Endogenous and Exogenous

Endogenous hormones are naturally produced within the body by organs such as the ovaries, adrenal glands, and pituitary (Paoletti, 2015). On the other hand, exogenous hormones, derived from external factors like birth control, hormone replacement, or BHRT, are not generated by an individual's endocrine system (BHRT Academy, 2015). The use of these external alternatives plays a crucial role in replenishing hormones that may be depleted in the body's natural system.

Estrogen

There are three types of estrogen: estrone (E1), estradiol (E2), and estriol (E3). Estrone (E1) is proliferative, most abundant

in postmenopausal women, and higher in overweight women, often stored in body fat. Remembering that "one" is in estrONE can help associate it. However, it is not administered by itself due to higher risks of cancers (BHRT Academy, 2015). Estradiol (E2) is the most commonly used form in Westernized medicine, but it's crucial to note that E2 can convert to E1. The association with "two" in EstraDIol can aid in recalling it. Estriol (E3) is considered the safest form of estrogen due to its cancer - protective properties. Notably, Estriol does not convert to E1 and is considered the weakest yet safest estrogen (Reiss, 2001).

E2 is typically administered in combination with E3 due to the presence of alpha and beta receptor sites (BHRT Academy, 2015). When given together, E3 acts as an anti - aging inhibiting binder, making it more challenging for E2 to convert to E1. This combination approach enhances the therapeutic benefits while minimizing potential risks associated with estrogen administration.

There are two types of receptors: estrogen receptor alpha and estrogen receptor beta (Reiss, 2001). Estrogen receptor alpha binds to the steroid hormone estrogen, mediating proliferative effects on breast and uterine cells (BHRT Academy, 2015). In contrast, estrogen receptor beta binds to the steroid hormone estrogen type - estriol (E3). Estrogen receptor beta acts by antagonizing proliferation and induces differentiation through apoptosis, according to the BHRT Academy in 2015. In simpler terms, E1 acts on the alpha receptor, E2 acts on both the alpha and beta receptors, and E3 acts on the beta receptors (BHRT Academy, 2015).

The binding affinity for Estrone is 5: 1 (5 alpha, 1 beta), and the binding affinity for Estradiol (E2) to the estrogen receptor site is 1: 1 (1 alpha; 1 beta), while for Estriol (E3), the binding affinity to the estrogen receptor site is 1: 3 (1 alpha: 3 beta) (BHRT Academy, 2015). According to the BHRT Academy, when E3 is given in combination with E2, it "may act as an anti - estrogenic inhibiting E2 binding. " Therefore, it is recommended to administer Estradiol (E2) and Estriol (E3) concurrently and without Estrone (E1). Importantly, estrogen should never be given orally due to the risk of estrone conversion, thereby increasing the risk of cancers, cardiovascular disease, and the possibility of a stroke (Paoletti, 2015). Administered estrogen has been most effective. Estriol (E3) is effective for reversing vaginal, labial, and urogenital atrophy (Paoletti, 2015). When provided in combination with testosterone for deficient patients, it can improve sexual stimulation or orgasm. Additionally, applying Estriol to the perineum and bladder can enhance tone (BHRT Academy, 2022).

A Love Affair with Estrogen

Estrogen plays a role in over 400 functions within the body, with estrogen receptor sites even appearing on the heart (Smith, 2023). The first compounded estrogen, Tri - est, is a combination of all three estrogens: 10% Estrone (E1), 10% Estradiol (E2), and 80% Estriol (Paoletti, 2015). Due to the higher risk associated with Estrone, there is a shift away from Tri - est, and instead, Bi - est is often prescribed. While there is no standard ratio, the prevailing trend is Bi - est 50: 50, indicating 50% Estriol and 50% Estradiol (Paoletti, 2015).

Alternatively, Bi - est 80: 20 comprises 80% Estriol and 20% Estradiol.

Administering Estriol aims to harness its protective benefits, despite being a weaker estrogen. It is uniquely powerful in its ability to block the actions of stronger estrogen at the receptor site (Paoletti, 2015; Smith, 2023). This strategic use of estrogen compounds allows for a personalized approach to hormone therapy, minimizing risks while optimizing therapeutic benefits. 2 / 2

Progesterone

Progestin - No more. Redirect your focus from the use of progestins, the synthetic form of progesterone, known as progestin, and instead concentrate solely on progesterone. Following ovulation, a woman's ovaries produce progesterone, preparing the body and the uterus for conception (Reiss, 2001). The word progesterone itself conveys its meaning, with "pro" signifying "for" and "gest" referring to gestation (Reiss, 2001). Progesterone plays a pivotal role in conception and functions as a protective factor for the body. Dr. Reiss M. D. describes progesterone as a "hormonal harmonizer" and the "estrogen shock absorber" that balances estrogen levels (pg.99).

In general, women in menopause tend to be progesterone deficient. The loss of hormonal balance can potentially expose women to the risks of estrogen dominance, leading to conditions such as endometriosis, fibroids, polyps, adenomyosis, irregular menses, and heavy menses (Reiss, 2001 & Paoletti, 2015). Understanding progesterone's vital role is crucial for maintaining hormonal balance and promoting overall women's health.

Signs and symptoms of progesterone deficiency include Amenorrhea, Oligomenorrhea, heavy and frequent periods, PMS, PMDD, adenomyosis, endometriosis, Fibroids, and Insomnia (Reiss, 2001; BHRT Academy, 2015). It is crucial to recognize that Progestins or progestogens, like Provera, are chemicalized progesterone substitutes (Reiss, 2001). They do not mirror the progesterone produced by your body or resemble substances like prometrium (made from Peanut oil) or bioidentical progesterone (compound pharmacists can make it without peanut oil). The latter aligns with your body's chemical structure, being bioidentical to the progesterone your body naturally produces. Moreover, the use of progesterone in BHRT is associated with a lower risk of breast cancer. Progesterone, as noted by Dr. Reiss in 2001, acts as a natural tranquilizer, emphasizing its broader impact on women's health beyond hormonal balance.

Progesterone influences the enzymes responsible for converting E2 to E1 and E1 to estrone sulfate, which is the stored estrogen in the body. By doing so, progesterone plays a crucial role in reducing the risk of estrogen effects on breast tissue and regulates estrogen receptor sites (Paoletti, 2015). This regulatory function underscores the importance of progesterone in maintaining a balanced hormonal environment and mitigating potential risks associated with estrogen dominance.

Testosterone is often a favored hormone due to its association with increased stamina, vitality, strong muscles, a leaner body

(when not overdosed), stronger bones, heightened libido, and higher nitric oxide levels (Reiss, 2001; BHRT Academy 2015). Typically, by the age of 35, women experience a decline in testosterone, while estrogen declines at a faster rate. This hormonal shift can lead to the development of facial hair and loss of hair on the body. This occurs because of the sex hormone - binding globulin (SHBG), a liver - produced protein that travels with hormones throughout the body (Reiss, 2001).

SHBG plays a crucial role in regulating the availability of hormones to cells. Higher estrogen levels result in increased binding effects of SHBG on estrogen and other hormones. However, during menopause, the decline in estrogen leads to the release of more testosterone in the body, as estrogen becomes detached from the bound SHBG protein. This makes testosterone more available to sensitive cells in the body. In men using testosterone replacement, SHBG levels can be reduced, further influencing the balance of hormones in the body.

Testosterone in women has been shown to enhance balance, eye - hand coordination, and reduce the risk of bone fractures in the event of falls (BHRT Academy, 2015). Notably, testosterone can play a crucial role in improving anxiety and depression (BHRT Academy). Before initiating testosterone therapy, it is essential to conduct hormone level assessments through laboratory tests. Ideally, hormone levels should be checked on days 19 - 21 of a 28 - day cycle or one week before the onset of menses when hormones are at their normal peak levels.

When applying hormone cream, common areas include the forearm, upper thigh (avoiding this area if involved in sexual activities), and wrist (Paoletti, 2015). This approach ensures proper absorption and effectiveness of the hormone treatment.

Subjective Assessment

Evaluate the patient's appearance and mood, paying attention to any disparities between their self - report and their presentation. This is particularly crucial when assessing menopausal women who often complain of symptoms such as hot flashes, mood swings, weight gain, memory fog, hair loss, irritability, anxiety, vaginal dryness, low libido, sleep disturbance, joint pain, and depression. These symptoms commonly manifest in the late 40s, early 50s, and beyond, coinciding with the onset of hormonal shifts or deficiencies. Observing and understanding these subjective aspects are essential for a comprehensive assessment of the patient's well - being.

Objective

During a vaginal exam, well - developed and well - nourished (WDWN) females typically exhibit symptoms indicative of atrophic vaginitis. These symptoms include a lack of rugae, paper - thin vaginal tissue, and the labia often appearing pale - pink.

Assessment

The presence of menopause and vasomotor symptoms such as hot flashes and night sweats.

Plan

Labs Ordered

The following baseline labs should be ordered prior to treatment.

- Follicle - Stimulating Hormone (FSH)
- Luteinizing Hormone (LH)
- Estradiol
- Progesterone
- Dehydroepiandrosterone Sulfate (DHEA - S)
- Sex Hormone Binding Globulin (SHBG)
- Testosterone
- Vitamin D
- Vitamin B12

Typical Lab Findings in Menopause

- Low progesterone (0.0 - 1.0) with low estradiol (<0.6 - 54.7) and high FSH 25.6 – 134.8
- Low progesterone to low or normal estradiol (women with a higher body fat percentage may have normal estradiol)
- Possible low - high estradiol in perimenopausal women (if a woman is perimenopausal or having cyclic menses; hormones should ideally be checked on day 19 - 21 of their cycle)
- Low progesterone to estradiol ratio (10 estradiol to 1 progesterone ratio)

Optimal Lab Range for Serum – dependent of Laboratory used Menopausal women

- Estradiol value 30 - 80 or upper 2/3 limits if low less than <30 she will not ovulate and moving into menopause if the FSH is high as well – estradiol less than 29 what you see in menopause women
- Progesterone value: 10 - 25 is normal (some rec levels to be 10 - 15) for cycling women or upper 2/3 of the luteal phase; in menopause value 0.0 - 0.1
- Testosterone value: 20 - 40 (some rec 30 - 80)
- Free Testosterone value usually above 1
- FSH value: above 26.5 – and 1 year no menses menopause (lab dependent 25.8 - 134.8)
- DHEA - S 41.2 - 243.7 (ideal when over 100 do not need to treat)
- LH: value 7.7 - 58.5
- Vitamin D 30 - 100.00 (ideally you want this value above 40)

Treatment Options “remember start low and Slow”

- Topical creams, patches, oral progesterone, oral estradiol, vaginal creams and rings, and pellets. Topical progesterone, vaginal rings, and pellets are not yet available through most westernized pharmacies.
- The treatment should be specific to the patient's symptoms. For example, if a patient complains of anxiety and insomnia, oral progesterone should be given at bedtime because it works on the GABA - receptor site of the brain to create a calming effect and promote sleep.
- The safest approach is a **synchrony of three: topical estrogen, topical testosterone, and oral progesterone**. Westernized pharmacy offers the Climara patch (estradiol transdermal patch, starting dose 0.025 mg, once a week) and the Vivelle - Dot patch (estradiol transdermal patch starting dose 0.025 mg, two times a week). Both treatments are considered BHRT, however they only have the estradiol component. Estring, 2 mg, is an estradiol

vaginal ring that is effective for three months. Oral estrogen is highly advised against.

- Estrogen and progesterone should be prescribed simultaneously. Acceptable progesterone formulations include topical progesterone (not available through westernized pharmacy) or oral progesterone. The BHRT Academy [4] shows that topical progesterone is recommended for women over the age of 65 years and/or have been in menopause for more than 10 years. Oral progesterone can only be considered with the consultation of a hormone specialist and extensive consideration of risks versus benefits. Oral progesterone is recommended for women who suffer from depression, anxiety, and most importantly with insomnia.

Patient Conditions Requiring Consultation

Patients who experience at least five of the following: headaches, hypertension, vaginal dryness, mood swings, weight gain, lack of energy, low libido, memory fog, low body temperature, hair loss, fluid retention, sleep changes, anxiety, depression, frequent urinary tract infections, poor stress tolerance, hot flashes, hair thinning, fatigue, bone loss [7].

Patient and Family Education

Educate patients on the potential risks versus benefits.

- Risks: Cardiovascular disease, stroke, heart attack, venous thromboembolism, dementia, cancer, and death [1].
- Benefits: Alleviates menopause symptoms, prevents bone loss, and reduces risk of fractures [3].

Follow up

Baseline labs should be ordered prior to administering hormones, except in patients who experience chronic UTIs and vaginal atrophy. Start low dose vaginal hormones to start relieving the patient's vaginal symptoms. In addition, follow - up labs should be ordered every 3 months.

- Once a woman has been in menopause for 10 years or over the age of 65, systemic oral BHRT/HRT is not recommended because the risk of a stroke, heart attack, and cancer increases. Women who need systemic hormones should be seen by a hormone specialist. However, it is not necessary for women who need localized hormones to be seen by a hormone specialist [6]. Localized treatment is advised if the patient experiences symptoms such as vaginal dryness.
- Traditional westernized - approached providers that only prescribe HRT vs. BHRT/HRT providers are taught that a woman should never be given unopposed estrogen including localized estrogen. Progesterone offers protection against the uterus and breast cancer risk that comes with estrogen.
 - Treat the symptoms, not the lab values because lab values would show the patient as deficient. However, if injectable hormones or pellets are given, then hormones can be read through bloodwork.
 - Vaginal bleeding can persist for the first six months of treatment. If bleeding continues beyond six months, an endometrial biopsy is required [1].

Record Keeping

- At the initial visit, baseline labs and education regarding risks vs. benefits should be discussed and evaluated prior

to initiating treatment. Women may be prescribed localized hormone treatment at the initial visit.

- Patients should have a follow - up appointment every 3 - 6 months.
- Once lab results are reviewed at follow - up visits, women may be prescribed systemic hormone treatment.
- If a patient is being given testosterone, which is considered a narcotic, the patient will need a follow up appointment every 3 - 4 months.
- Oral estrogen should never be given to menopausal women due to the risks of a stroke or heart attack [7].
- If treatment is topical (patch or cream), hormone labs via serum blood testing is not a reliable indicator for treatment efficacy. However, oral estrogen can be read through serum blood testing. Treatment options currently available through Kaiser cannot be read through serum blood testing.
- Women on hormones should be scheduled for pertinent screenings such as mammograms (up to date according to recommended guidelines) and pap smears (up to date according to age recommendations).

Sample Treatment Options

Westernized treatment approach for systemic use:

- E2 treatments: Climara patch (0.025 mg once a week) or Vivelle - dot (0.0375 mg two times per week), and Avoid oral estrogen; patch is preferred. Ideally add compounded Estriol for cancer protection to E2
- Oral Progesterone (100 - 300 mg one tablet by mouth every night), and
- Topical Testosterone 2% (5 mg/1 gram one click once a day) 1 click = 1.25 mg, 2 clicks = 2.50 mg.

One hormone holiday is permitted one day a week.

Bioidentical treatment approach: Bi - est

- If the woman is newly menopausal: Biest (50/50) (5 mg/ 1 gram one click once a day) can be given, which is 50% E2 and 50% E3, and
- Later in menopause: 80/20: 80% of the safer estrogen known as estriol (E3) and 20% of estradiol (E2).
- Depending on your compounding pharmacy – most prefer – some use pump/ clicks or other devices
- Topical Biest (80/20) 5 mg/1 gram sig: 1 click qday (1 click = 1.25 mg), Disp 30 grams
- Or Bi - est (80/20) 2.5mg/1 gram sig: 1 click qday – (1 click = 0.625mg)
- Or Bi - est (80/20) 0.25mg/gram cream sig; apply 1 gram
- Or Bi - est (80/20) 0.25mg/gram Sig; apply 1-gram qday (4clicks) daily Disp #30 grams R3
- Or Bi - est (50/50) 5mg / 1 gram Sig: 1 click qday (1 click = 1.25mg)
- Or Bi - est (50/50) 2.5mg/1 gram Sig: 1 click qday – (1 click = 0.625mg)
- Or Bi - est (50/50) 0.25mg/1-gram cream Sig: apply 1 gram (4 clicks) daily disp 30 grams R3
- Or Bi - est (50/50) 0.25mg/1ml cream Sig: apply 0.5ml (2 clicks) qday disp 30 grams R3 – (Common dosing)

Progesterone

- Progesterone SR 50 - 200 mg 1 tab po qhs (optimal dose 100 - 200mg)
- Prometrium (100 - 300 mg one tablet by mouth every night) (Brand Progesterone), and

Assess peanut allergies due to its component of peanut oil.

- Progesterone topical cream 10 - 50mg daily (average 20mg qday) Sig: 20 mg qday
- Topical Progesterone (100 mg/1 gram 2 - 4 clicks once a day)

Example: 1 click = 25 mg, 2 clicks = 50 mg.

Testosterone

- 1) Topical testosterone for female dosing is not available through westernized pharmacy. Topical Testosterone 2% (5 mg/1 gram one click once a day) 1 click = 1.25 mg, 2 clicks = 2.50 mg.
 - Topical testosterone is effective for stimulating clitoral orgasms, vaginal atrophy, and lichen.
 - Vaginal treatment approach for women who have been in menopause for 10 years (safer treatment):
- 2) Estriol (E3) (1 mg/ 1 gram) Sig; 1 gram per vagina every night for 14 days then decrease use to 1 gram per vagina every other day (M/W/F or T/Th/Sat or M/W or Tue/ Thur) apply to perineum help increase bladder tone

Conclusion

Overall, Bioidentical Hormones: A Potential Life - Changer
Bioidentical hormones have the potential to bring about significant positive changes in a woman's body, mental health, vitality, and overall sense of normalcy. However, it is crucial to conduct a thorough assessment of the risks versus benefits before initiating treatment. The risk profile associated with hormone use should be clearly presented and stated.

Prior to commencing hormone therapy, baseline labs should be ordered to accurately assess the patient's hormonal needs. Additionally, it is advisable to recommend or order updated mammograms and pap smears (if age - appropriate). This comprehensive approach ensures a holistic evaluation of the patient's health and contributes to the effectiveness and safety of the hormone therapy.

Bioidentical hormones have the potential to bring about significant positive changes in a woman's body, mental health, vitality, and overall sense of normalcy. However, it is crucial to conduct a thorough assessment of the risks versus benefits before initiating treatment. The risk profile associated with hormone use should be clearly presented and stated.

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Bioidentical Hormone Replacement Therapy BHRT offers a promising approach to managing menopausal symptoms, with the potential to significantly enhance the quality of life for many women. However, it is crucial for healthcare providers to conduct thorough assessments and carefully weigh the risks and benefits before initiating treatment. By

incorporating evidence-based practices and ongoing patient education, providers can optimize the therapeutic outcomes of BHRT while ensuring patient safety.

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