The Benefits and Risks Associated with Hormone Replacement Therapy

An Honors Thesis

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ABSTRACT
Hormone Replacement Therapy is the most common treatment for menopausal women worldwide. Before HRT can be discussed, a woman must know the physiology of the body and the reasons that menopause begins. Upon entering menopause treatment options should be researched in order to find a treatment that best suits the patient. HRT offers the most benefits with the least amount risks for most groups of women, though there are women who either for medical or personal reasons choose not to undergo HRT. The search for an alternate treatment that is as beneficial in treating symptomatic and disease related problems is crucial to each individual woman. There are many ideas for alternate treatments, but most are not supported clinically. The key to choosing a treatment is finding the best combination of treatments for the individual patient. This paper outlines a detailed description of menopause, and the many different approaches that may be used in order to manage the side effects of menopause.
I. INTRODUCTION

Menstruation is a natural body function that affects every woman in the world. Menstruation makes child bearing possible, yet it is followed by an awkward and oftentimes uncomfortable stage called menopause. Signs and symptoms associated with the onset of menopause include, irritability, insomnia, anxiety, depression, headaches, hot flashes, osteoporosis, and cardiovascular disease. The severity of these menopausal side effects will vary with body type, and can be managed through techniques such as hormone replacement therapy (HRT), alternate medications, non-traditional therapy, diet, exercise, and natural supplements. This paper outlines a detailed description of menopause, and the many different approaches that may be used in order to manage the side effects of menopause.

II. MENSTRUAL CYCLE AND MENOPAUSE

Menopause is not only a physical stage that the female body encounters, but also a major emotional and psychological event in a woman’s life. A woman begins to learn the cycle of her body at a young age, beginning as early as 12 or as late as 20. A female first experiences a monthly menstrual cycle at the average age of 14. The female menstrual cycle lasts approximately 28 days and consists of three phases: menstruation phase, proliferative phase, and the secretory phase. During these three phases the ovarian cycle is also going through a 28-day phase. The ovarian cycle also consists of three phases: follicular phase, ovulation, and the luteal phase. These phases occur and overlap as follows:
Menstruation Phase

Day One of the menstruation cycle is the first full day of menstrual bleeding and lasts from three to seven days. The uterine lining built up in the previous cycle is cleared away, and the hormone levels from the previous cycle take a sharp decline, causing the physical and emotional symptoms commonly associated with menstruation.

Proliferative and Follicular Phases

The proliferative phase begins at the end of menstruation and usually lasts until day 14. During this phase the hypothalamus signals the pituitary gland to secrete the follicle-stimulating hormone (FSH). This hormone stimulates an ovarian follicle in the ovaries to grow and the egg inside to mature. As the follicles mature they move toward the surface of the ovary. The pituitary gland releases luteinizing hormone (LH), which stimulates the follicle to produce and secrete estrogen. Estrogen causes the uterine lining to grow in preparation to receive a fertilized egg. The follicle stimulating hormone levels then decrease, while levels of LH increase. Just before ovulation, there is a surge of estrogen followed by a surge of LH. The mature follicle then migrates to the surface of the ovary (Brockie et al, 1999).

Ovulatory Phase

Ovulation occurs during the secretory phase approximately 14 days before the onset of the menstrual period. During this period the pituitary gland releases a heavy surge of LH, and 24 to 36 hours after the surge, the mature follicle ruptures, releasing a matured egg into the fallopian tube. The egg will survive from 24 to 48 hours. The remainder of the ruptured follicle (corpus luteum) recedes back to the ovary and begins to secrete
progesterone. Progesterone causes an increase in blood flow to the uterine lining and inhibits other eggs from being released (Brockie et al, 1999).

**Secretory and Luteal Phases**

The secretory phase lasts from day 14, including the ovulatory phase of the ovarian cycle, through day 28 of the menstrual cycle. If fertilization by a sperm occurs within 24 to 48 hours, the corpus luteum continues to secrete progesterone. If the egg does not become fertilized the corpus luteum no longer functions and levels of estrogen and progesterone decrease. The uterine lining, endometrium, cannot be maintained without these hormones and begins to break away from the walls of the uterus. The lining is shed and thus another menstruation cycle begins (Stoppard, 1994).

**Perimenopause and Menopause**

Menopause can be described as the permanent cessation of menstruation resulting from the failure of the ovaries to produce the female sex hormones estrogen and progesterone. Perimenopause is the stage lasting several years on either side of your last menstrual cycle, and it is during this time most physical changes take place. Medically menopause is defined as the loss of ovarian follicular activity and the loss of menses for 12 months (http://www.imaginis.com/breasthealth/hrt.asp). Menopause typically occurs in women between the ages of 45 and 55 years of age, the average age of natural menopause being 51 (Stoppard, 1994). According to a public health service publication published in 1966 by the U.S. Department of Health Education and Welfare, approximately 1% of women become postmenopausal before the age of 40, and 5% become postmenopausal after age 55. Menopause transition occurs during the several years before menopause causing levels of FSH to increase, thus causing estrogen and progesterone hormone levels to
become erratic. Due to these varying levels of hormones, many long and short-term side effects occur during this period of time. Short-term side effects present hot sweats, irritability, sleep disruption, and vaginal dryness during the menopause transition, whereas long term side effects may develop into cardiovascular disease and osteoporosis (Brockie, Hope, and Rees, 1999). There are several different groups of women who enter the menopause stage, the hysterectomy group, perimenopausal with uterus, menopausal with uterus, and postmenopausal with uterus. The following information provides descriptions of these groups along with the different symptoms and treatments that are experienced during menopause.
Figure 29.17 The sequence of events in the endocrine control of the ovarian cycle and their correlation with the phases of the endometrium during the menstrual cycle.

(Fox & Van De Graaff, 1992)
(Fox & Van De Graff, 1992)
III. MENOPAUSE AMONG DIFFERENT GROUPS OF WOMEN

Hysterectomy and Oophorectomy

Women who have undergone a hysterectomy, removal of the uterus, and wish to treat their symptoms of menopause medicinally only require an estrogen supplement. Replacement can be administered as a pill, transdermal patch, vaginal gel or surgical implant. Women who have undergone a hysterectomy will experience menopause approximately four years earlier than women with a uterus (Brockie et al., 1999).

Oophorectomy (removal of both ovaries) is the most common cause of premature menopause, though both ovaries must be removed for menopause to occur. One ovary still has the capability to produce eggs and hormones as efficiently as two ovaries. Oftentimes during a hysterectomy an unneeded oophorectomy, or removal of both ovaries, is performed. There should be a thorough discussion with a physician/surgeon before removing both ovaries. For women that have undergone both procedures, it is important that hormone replacement therapy (HRT) is explained by a physician in order to reduce the risks of osteoporosis and cardiovascular disease (Stoppard, 1994).

Perimenopausal with Uterus

Perimenopausal women are those women who are approaching menopause. These women are encouraged to start seeking information about the form of treatment they would like to utilize while going through the transition to menopause. The most common HRT, administering estrogen and progesterone pills, simulates a regular mensing cycle either every month or every three months, although 5% of women do not mense at all (Jacobowitz, 1993). Those choosing the three-month cycle report having heavier and longer menses than previously, and many women intentionally miss the progesterone
portion of the treatment because they feel their short-term symptoms are improved without progesterone (Berman, Epstein, and Lydick, 1996). The danger with this choice is that by administering both hormones the risk of endometrial cancer is increased (Brockie et al., 1999). Perimenopause should be a time for women to determine which therapy they wish to seek in order to be prepared when menopause occurs.

**Menopausal with Uterus**

A woman is considered menopausal for the first year after her last mense. This period of time is when HRT is most used to treat short-term side effects. It is often hard to determine when a woman actually goes through menopause if she is receiving HRT before menopause, but 80% of women are known to be postmenopausal by the age of 54 (Brockie et al., 1999). Women with a uterus must take an estrogen/progesterone medication in order to prevent the development of uterine cancer. Romoff (1999), a firm believer in estrogen/progesterone therapy, reports “...the use of estrogen with progesterone added found a 20 percent reduction (relative risk=0.8) in uterine cancer.” Though estrogen/progesterone therapy is most commonly administered orally, an estrogen pill is taken for the first ten to fourteen days and a progesterone pill the last 10 to 14 days. It can also be administered with a transdermal patch or a vaginal cream. The menopausal time of a woman’s life is often the most uncomfortable and most psychologically taxing. Treating symptoms medicinally and behaviorally increases the likelihood of a better experience and a better adjustment to postmenopausal life.

**Postmenopausal with Uterus**

Postmenopausal women with a uterus can begin taking an estrogen/progesterone pill that combines both hormones in a daily pill. The daily estrogen/progesterone pill ceases most
mensing patterns, but in some cases there may be some “breakthrough” or “spot” bleeding (Brockie et al., 1999). This continued treatment is beneficial for the long-term side effects of menopause. Osteoporosis and cardiovascular disease are not prevented with HRT that is utilized strictly through the menopausal stage. In order to receive the benefits of HRT on osteoporosis and cardiovascular disease, HRT must be continued for at least five years postmenopause, and is strongly recommended for at least five to ten years. During these five years the short-term side effects of menopause begin to fade and thus treatment is continued strictly for long-term benefits.

IV. WOMEN WITH HISTORY OF BREAST CANCER

HRT Risks and Benefits

The effect of HRT on breast cancer is a very controversial topic. Currently any previous history of breast cancer among the patient is a contraindication to treat menopause with HRT. Although there is not any information that supports or refutes HRT in breast cancer patients, it is still a personal and controversial decision (http://www.healthsquare.com/fgwb/whlch31.htm). Most studies show that increased risk of breast cancer occurs after 10 to 15 years of estrogen use (Hellgren, Mattsson, Samsio, and Sporrong, 1989). A recent study conducted at Brigham and Women’s Hospital in Boston, involving 60,000 women, was the largest long-term study conducted on women treating menopause with HRT (www.healthsquare.com/fgwb/wblch31.htm). The study reported that women using HRT less than ten years postmenopause “...had a 24% reduced risk of dying from breast cancer.” Women choosing to use HRT for more than 10 years increase their risk for breast cancer by 43% compared to women not
choosing to take hormones. According to the same study women who had a family history of breast cancer were at no greater risk of developing breast cancer than those lacking a family history of breast cancer. Those who did develop breast cancer as a result of HRT had a lower death rate than those with breast cancer who had never used HRT (http://www.heartinfo.org/news97/hrtnem62797.htm).

Since HRT is such a controversial treatment for those with breast cancer or with increased risk for breast cancer, other alternatives are available. Tamoxifen is a non-estrogen hormone that is being used to treat short-term menopausal symptoms, but in turn may cause abnormal endometrial polyp development among some women. Just as women who have previous history of breast cancer must have routine mammograms, if tamoxifen is used as an alternate therapy, ultrasounds of the endometrium are also needed on a routine basis. In most cases, doctors believe that unless a patient is in the high-risk category for developing breast cancer, the benefits of HRT greatly outweigh the risks when used for five years or less (http://www.holistic-online.com/Remedies/hrt/hrt_risks-of-ERT.htm).

Medication Alternatives

There is no medication alternative that simulates the same benefits achieved with HRT. However, women with a history or risk for breast cancer do have options in treating their symptoms and prevention of osteoporosis and cardiovascular disease. There is currently a line of medications called SERMS, selective estrogen-receptor modulators, that are prescribed for patients with increased susceptibility to breast cancer. The two most clinically tested medications are tamoxifen and raloxifene. Both medications provide a decreased risk of breast cancer, but they do not provide the same protection against
osteoporosis and cardiovascular disease as HRT (Berlin and Klein, 1996). Tamoxifen has been tested and has been shown to decrease the risk for breast cancer in high-risk patients by 45%; however, tamoxifen increases the risk of uterine cancer in women who have not had a hysterectomy. Tamoxifen has also not been proven to lower the risk for osteoporosis and cardiovascular disease, and in 25% of women tamoxifen increases the frequency of short-term symptoms. Raloxifene not only significantly reduces the risk for breast cancer by 75%, it has also proved to be beneficial in decreasing the incidence of fractures by 50% without increasing the risk for endometrial cancer. Both of these medications have been approved by the FDA and are currently being used to treat high-risk breast cancer patients for up to five years (Ojeda, 1995). Other alternative medications for women who are at high risk for breast cancer include nutritional supplements that can be found in forms of medications, or they may be supplemented by the diet.

Lifestyle Modifications: Preventing Osteoporosis and Cardiovascular Disease

Diet and exercise are two aspects that can help treat the short-term symptoms of menopause, while also decreasing the risk for osteoporosis and cardiovascular disease. Adding products containing soy or natural estrogens to the diet can help treat hot flashes. Treating hot flashes with soy may reduce the occurrence by 45%, which is half of the reduction of occurrence of hot flashes by HRT (Sheehy, 1998). Many products made from soy can now be found, including, tofu, milk, soy burgers, sausages and a variety of other meat alternatives. Soy is beneficial because it contains phytoestrogens, which may reduce some of the effects produced by HRT. Soy is also a low-fat source of protein, which helps reduce the risk for cardiovascular disease. Soy has been shown to reduce
cholesterol, strengthen bones, and decrease hot flashes; however, it is not a substitute for HRT, but can be included in the diet in order to promote healthier eating habits and decrease the risks for osteoporosis and cardiovascular disease (Col, 1997). Diet alone is more beneficial in decreasing the risk of cardiovascular disease than the use of HRT. Improving one’s health by decreasing fat intake and increasing the intake of such vitamins and minerals as folate, calcium, vitamin B, and vitamin E not only aid in improved body function, but also in reducing the risks for colon and cervical cancer, as well as heart disease (Kato, Minaguchi, Nishino, 2000).

Exercise is another lifestyle modification that can reduce the risk for heart disease and help prevent the increase of bone loss experienced with osteoporosis. Weight bearing exercises, such as weight lifting, aerobics, and jogging, increase bone density and in turn reduce the risk of fractures. A woman who exercises twice a week has a greater bone density than a woman who exercises once a week or a woman who does not exercise at all (Stoppard, 1994). Exercise has been shown to reduce the risk of heart disease when performed three to six times a week for at least 20 minutes (Collins and Beale, 1996). Lifestyle modifications such as diet and exercise do not replace HRT, but they can help women who are at risk for breast cancer to treat symptoms and prevent diseases such as osteoporosis and cardiovascular disease, since they are unable to receive these benefits when taking the medication alternatives to HRT.
V. WOMEN REFUSING HRT

Reasons for Refusal

There are several reasons women may refuse HRT. Other than those women at risk for breast cancer, which has already been discussed, many women do not support the use of equine estrogen due to animal rights beliefs or personal conflicts with the use of animal products. Some women would rather treat menopause the “natural way” with medication alternatives or even non-traditional methods of controlling symptoms. Other reasons for refusing HRT may be that HRT causes side effects that are difficult for an individual to tolerate or HRT may not help some individuals with specific menopausal symptoms. Choosing a treatment for menopausal symptoms and the prevention of osteoporosis and cardiovascular disease are personal choices. The important aspect is finding a treatment that best suits the patient and also provides the most benefits with the least amount of risks. Health benefits are not the only aspects of therapy that should be taken into consideration; emotional benefits are also important when choosing a therapy. Medications may reduce physical symptoms, but emotionally it is important for a woman to choose a therapy that she is comfortable with and one that meets her emotional needs as well (Sheehy, 1998).

Medication Alternatives

There are many non-hormonal medications and a few hormonal medications that may be used to treat menopausal symptoms in women not choosing to utilize HRT. Non-hormonal medications include antidepressants, tranquilizers, sedatives, and drugs such as clonidine and propranolol. Hormonal medications include estrogen-androgen combinations and SERMs, tamoxifen and raloxifene (Whitehead, 1998).
**Non-Hormonal.** There are many non-hormonal medications used to help treat the symptoms of HRT. Sedatives are used to calm the brain, but as a result they induce drowsiness. Sedatives also decrease irritability in the autonomic nervous system, which in turn may aid in the reduction of hot flashes, but they do not help treat the emotional issues, such as anxiety and depression, that accompany menopause. Sedatives should be used with caution and considered only for temporary relief of symptoms because they are addictive (Jacobowitz, 1993). Tranquilizers are not a safe alternative to HRT. Some physicians who believe menopausal symptoms are “neurotic” may prescribe tranquilizers or antidepressants rather than traditional HRT (Stoppard, 1994). Tranquilizers suppress the function of the hypothalamus, thus reducing symptoms such as anxiety, irritability, and insomnia temporarily. Just as sedatives, tranquilizers are very addictive and should only be used on a short-term basis (Jacobowitz, 1993). Antidepressants, a less aggressive medication than tranquilizers, treat some of the psychosocial side effects of menopause such as anxiety and irritability. Antidepressants increase the production of serotonin, a neurotransmitter in the brain known to ease anxiety and promote a sense of well-being (Ojeda, 1995). Antidepressants and tranquilizers have better effect when used in conjunction with HRT and some form of psychological counseling. Clonidine and propranolol are two non-hormonal medications prescribed to act on the vasomotor symptoms of the nervous system (Brockie et al, 1999). Clonidine and propranolol are specifically used to treat hot flashes in perimenopausal and menopausal patients. Originally, clonidine and propranolol were placed on the market for the relief of migraines and hypertension symptoms. Clonidine and propranolol are now available to women who do not have relief from hot flashes while taking HRT (Stoppard, 1994).
Hormonal. Women refusing HRT can use medication alternatives such as SERMs, the preferred treatment for breast cancer patients, and estrogen-androgen combinations. Both of these alternative medications are man-made hormonal compounds that aid in treating the symptoms of menopause. Estrogen-androgen combinations do not reduce hot flash frequency as much as estrogen alone, and they also detrimentally decrease the level of HDL's (high density lipoproteins) in the blood stream. Estrogen-androgen combinations are not recommended for strictly treating short-term symptoms. These symptoms can be better treated with diet, but if a woman is seeking a medicinal alternative to HRT, estrogen-androgen combinations are man-made alternatives.

Selective estrogen-receptive modulators, such as tamoxifen and raloxifene, are also an alternative to women who choose not to take equine-based hormones. These medications have been studied more thoroughly than estrogen-androgen combinations, and provide short and long term benefits to the patients. Selective estrogen-receptive modulators are recommended for women who are at high risk for breast cancer and those who refuse HRT and would like to take a medication alternative (Ojeda, 1995).

Non-Traditional Alternatives

There are many non-traditional alternatives to HRT that not only treat the physical symptoms of HRT but also the emotional aspect of entering menopause. Complementary medicine, treating the patient and not the disease, is becoming more and more popular among women, yet the medical profession still neglects to recognize its benefits. There are several different types of complementary medicine such as naturopathy, aromatherapy, homeopathy, herbalism, acupuncture, acupressure, hydrotherapy, massage, and yoga.
Naturopathy. Naturopaths consider nutrition to be the anchor of health, and treatment usually involves fasting or other dietary constraints. Naturopaths believe that only natural or organic foods should be consumed and food supplements rather than vitamin supplements are recommended. Naturopaths also believe in the incorporation of exercise in adopting a healthy lifestyle. Exercises such as meditation, yoga, and relaxation exercises are suggested. The strict diet and emphasis on comforting the body are believed to help rid the body of harmful toxins in turn reducing symptoms such as hot flashes and mood swings caused by menopause (Stoppard, 1994).

Aromatherapy. Aromatherapy is recommended to reduce symptoms of menopause such as dry skin, muscle and joint pain, headaches, fatigue, insomnia, and depression. Aromatherapy is the use of the sense of smell to enhance mood, relaxation, and pain relief. Aromatherapy can be utilized through the burning of a candle, bathing in oils, absorption of oils through the skin, or inhaling through a handkerchief or pillow (Stoppard, 1994).

Homeopathy. Homeopathy is the belief that the substance that produces the symptoms of an illness will help to cure the illness. The homeopathic view of menopause is that the symptoms are a representation of an existing imbalance in the body. In turn, natural remedies are used to treat the symptoms, although the wrong doses may increase the symptoms. For example, Lachesis, the venom of a bushmaster snake, is non-toxic in small doses and is used to treat hot flashes. Women interested in homeopathic remedies should consult a homeopathic practitioner before treatment (Stoppard, 1994).

Herbalism. Herbalism is the most common non-traditional treatment used by women experiencing menopause. Many women use herbs to treat menopausal
symptoms, whether HRT has been refused or accepted. There are three main herbs that are used to treat symptoms of menopause: sage, vitex agnus-castus, and black cohosh. Sage may alleviate hot flashes; vitex agnus-castus may help to normalize hormonal levels; and black cohosh has estrogenic properties and help when feeling weak or tense. These are the three most common herbs sought for treating menopausal related symptoms, but treatment is not limited to these three exclusively. When using herbalism it is important not to defer medical treatment. Herbs are very useful when used in conjunction with other medicinal therapy (Stoppard, 1994).

**Acupuncture and Acupressure.** Acupuncture is the use of needles to create an electrical current in the body that relieves pain. The theory of acupuncture is that a life force, or energy force, flows through the body along channels, or meridians, which are closely related to the nervous system. Acupuncture aims to restore the flow of energy through the body by stimulating corresponding meridians, very similar to lines followed by nerves, to areas in which pain is felt. Acupressure is similar to acupuncture, but pressure is used rather than needles. The same theory of meridians is believed and by applying pressure to pressure points, menopausal symptoms are believed to be reduced. These two practices are not used in Western society as much as they are in Eastern cultures, but their popularity is gaining (Stoppard, 1994).

**Hydrotherapy.** Hydrotherapy is the use of water to bathe or drink in order to reduce pain and illness. Most forms of hydrotherapy include the use of hot and cold water in the same treatment. Common methods of hydrotherapy include saunas, scotch douche, sitz bath, and steam cabinets. A scotch douche is the use of hot and cold water sprayed up and down the spine stimulating spinal nerves. This treatment is good for
migraines and body aches associated with menopause. The sitz bath is the combination of hot and cold therapy. The feet are immersed in cold water while the buttocks and hips are immersed in warm water. This forces the blood flow to the midsection of the body in order to relieve cramping or muscle aching. The treatment is then reversed and the feet are soaked in hot water to increase the blood flow in the lower body to relieve tension in the legs and feet. Hydrotherapy is not only good for symptomatic treatment, but also for relaxation (Stoppard, 1994).

**Massage.** Massage relieves muscular tension. Neuromuscular massage is recommended to relieve the tension of women experiencing menopause. Massage is also good for relaxation and the removal of toxins when deep muscle massage is performed. Massage improves the nourishment of tissues and increases blood flow to the muscles (Stoppard, 1994).

**Yoga.** Yoga is a combination of several non-traditional alternatives to healing. Yoga encompasses stretching, breathing, flexibility, and relaxation techniques. Yoga consists of a series of postures, which promote a relaxed and supple body and a peaceful state of mind. Yoga is a form of exercise that should be approached slowly. Learning proper breathing and stretching techniques is the key to relaxing the body. The yoga theory not only promotes mental and emotional health, but also emphasizes the benefits of better dietary and behavioral habits. Yoga is a good well-rounded non-traditional alternative to many medical treatments (Stoppard, 1994).

Non-traditional alternatives to medicine are not recommended for everyone. When making any decision to utilize a non-traditional alternative to medicine, it is important to consult a physician. Medical treatment should not be ceased when using a non-traditional
therapy. A doctor should be consulted and kept current with the patient’s condition at all times. If there are any problems the therapy should be discontinued until a physician’s advice has been sought.

**Lifestyle Modifications: Preventing Osteoporosis and Cardiovascular Disease**

Diet and exercise are the two most focused-upon aspects of lifestyle modifications among women with history of breast cancer and those refusing HRT. Incorporating such vitamins and minerals as vitamins D, E, and calcium greatly help decrease the risk of osteoporosis. Vitamin D facilitates the uptake of calcium and helps the body absorb phosphorus. Supplements are not often needed for vitamin D since it is readily available through a normal diet and sunlight also can be synthesized to form vitamin D in the body. Too much vitamin D can cause bone thinning in postmenopausal women. Vitamin E taken in very high doses has said to be beneficial in treating hot flashes in women, but it has not been proven that vitamin E lessen hot flashes or that high doses of vitamin E are detrimental to the body. Calcium has been proven to aid in the prevention of osteoporosis and heart disease. Calcium supplements are recommended for perimenopausal, menopausal, and postmenopausal women. Items such as salt, sugar, and fat should make up a minimal portion of the diet. Many recipes are now available that include ingredients that are high in the previous vitamins and minerals as well as containing herbs that are used to help control menopause symptoms (Ojeda, 1995).

Exercise is also recommended to women experiencing menopause. Twenty to thirty minutes of strenuous exercise results in the release of endorphins, which are brain opioids similar to morphine. These endorphins can elevate and lift a mood to last up to eight hours (Stoppard, 1994). Exercise is also beneficial in reducing hot flashes and night
sweats. Exercise may also help reduce depression in women who are having a difficult transition into menopause. Exercise also increases bone density, which in turn protects bone loss and reduces the amount of hip fractures suffered by menopausal and postmenopausal women. Weight bearing exercise is recommended and includes, jogging, walking, aerobics, and weight training. Exercise also has many cardiovascular advantages in preventing heart disease. Exercise increases blood flow, strengthens the heart, and when used in conjunction with a healthy diet lowers blood lipid levels and cholesterol.
VI. SUMMARY

Menopause can be a very uncomfortable and awkward time in a women’s life. Of most importance is selecting a physician whom the patient feels comfortable in talking with about personal symptoms and situations. Menopause does not have to be trying on a woman physically or emotionally as long as the right treatment is sought. There is no universal treatment for menopause. The treatments are specific to certain risk factors, body types, personal beliefs, and past history, and therefore the period of perimenopause is very important. Women must begin approaching menopause with a positive attitude and must be willing to begin researching the treatment that best suites them as an individual. This is a time consuming process, but if it is done in advance of the onset of menopause, it can help prevent many long-term physical and emotional complications. Some women may prefer hormonal treatments while others may prefer non-traditional or natural therapies. Whatever the method, extensive research can determine the route that is best for the individual. Planning ahead and making arrangements for the future is the best way to handle menopause. Much information is available to assist the patient in making the best personal decision. Consultation with a physician or health care professional is an essential part of patient understanding and successful management of menopause and its’ various phases and effects.
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XXII


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