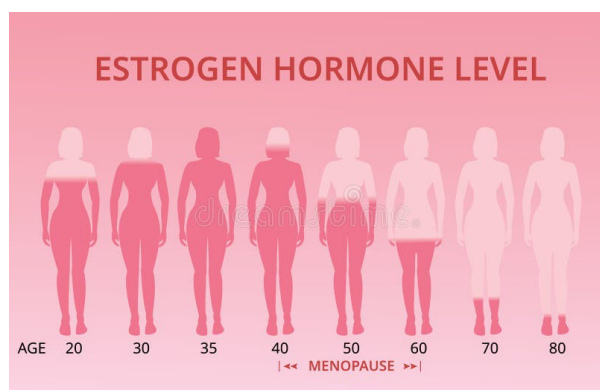


# GYNDOKTOR

SPECIALLÆGE DR. MED. PERNILLE DANNESKIOLD LASSEN

## MENOPAUSAL HORMONE THERAPY (MHT)

Menopause is medically defined as the point in time when a woman has not had a menstrual period for 12 consecutive months. Perimenopause is the transition period leading up to menopause and is often characterized by irregular periods. Women experience the period around menopause differently. About one third have few or no symptoms, one third have manageable symptoms, and one third experience debilitating symptoms. The symptoms are all related to declining ovarian function with fluctuating and decreasing production of the female hormone estrogen.



## MENOPAUSAL HORMONE TREATMENT

Menopausal hormone therapy (MHT) is given when relief from menopausal symptoms is needed. If the woman has a

uterus, treatment includes both estrogen and progestogen. The estrogen component consists of 17-beta estradiol which is identical to hormone naturally produced in the ovaries (bioidentical). Estradiol is in most cases administered transdermally as a gel or a patch. This administration bypasses the liver metabolism, thus eliminating the risk of venous thrombosis (blood clots in legs and lungs).

Progestogen is given either as the natural progesterone (bioidentical) or the synthetic progestin. The natural progesterone (i.e. **Utrogestan**) is given as pills. It is also available as a gel. This product, however, has a low absorption rate and is not marketed in Denmark. The synthetic progestin is given as pills (**Provera**) or within a hormonal IUD (**Mirena**).

In cases of hysterectomy, treatment in most cases involves estrogen alone.

## MYTH OR FACT

Menopausal hormone therapy (MHT) has received renewed attention after many years of caution due to concerns about

*This text is protected by copyright and may not be reproduced, distributed or used in any form without the prior written consent of Pernille Danneskiold Lassen*

## MENOPAUSAL HORMONE THERAPY (MHT)

breast cancer and blood clots. Today, there is growing awareness of the significant personal, social, and economic impact that untreated severe menopausal symptoms can have.

For many patients, however, it can be difficult to distinguish between facts, myths, and commercial interests—especially when information comes from podcasts or social media. This overview is based on the most recent guidelines from the Danish Society of Obstetrics and Gynecology (DSOG).

### MHT AND VASOMOTOR SYMPTOMS

Hot flushes, night sweats, and heart palpitations are among the most common symptoms during menopause. These are known as vasomotor symptoms and are often linked to poor sleep, fatigue, low energy, and mood changes. Most women experience relief from these symptoms within 2–5 years.

MHT is an effective treatment for vasomotor symptoms in most women. In some cases, single treatment with progesterone or progestins may also help, though the effect is less certain.

### MHT AND SLEEP DISTURBANCES

Sleep disturbances affect up to half of all women during the years around menopause. In many cases, these problems are secondary to hot flushes, and in such situations, MHT has been shown to be highly effective. MHT may also be considered in women who experience sleep problems without hot flushes, although the effect is less certain.

Treatment with progesterone alone has shown positive results in some studies—particularly in reducing the time it takes to fall asleep. However, sleep issues during menopause are often complex and influenced by many factors. Regular physical activity, good sleep habits, and stress management are important to consider as well. In some cases, melatonin may also be helpful.

### MHT AND JOINT OR MUSCLE PAIN

Joint and muscle pain is commonly reported during the peri- and postmenopausal period and is often considered part of the broader symptom picture. This is biologically plausible, as

# GYNDOKTOR

SPECIALLÆGE DR. MED. PERNILLE DANNESKIOLD LASSEN

---

## MENOPAUSAL HORMONE THERAPY (MHT)

estrogen receptors are found in cartilage, tendons, and bones.

Whether MHT improves musculoskeletal symptoms, however, remains uncertain, as no studies have specifically investigated joint or muscle pain as a primary outcome. If any effect exists, it is likely to be modest.

### SEXUAL DYSFUNCTION

Many women notice changes in their sex life during the menopausal years. Sexual dysfunction can be due to local factors (such as vaginal dryness, lack of lubrication, or pain), but often also involves decreased libido and reduced sexual satisfaction.

Local symptoms can be effectively treated with vaginal estrogen, typically administered as vaginal tablets (e.g. **Vagifem**). Reduced sexual desire is more challenging to treat. If MHT alone is not effective, supplementation with testosterone may be considered.

Like estrogen, testosterone is usually given as a transdermal gel. Research on testosterone treatment in menopause is

still limited, and potential long-term side effects are unknown. The treatment is therefore considered **off label**, meaning it is used outside its officially approved indication.

Short-term side effects—such as skin problems and increased hair growth—can occur but are generally rare. An improvement in sexual function is typically seen after 4 to 8 weeks. It is recommended to re-evaluate treatment after three months, including a blood test to ensure appropriate dosage and avoid overtreatment.

### MHT AND COGNITIVE SYMPTOMS

Cognitive symptoms are common during menopause, with up to half of all women reporting episodes of cognitive clouding—often referred to as “brain fog.” Women typically describe difficulties with memory, concentration, or needing more time to complete tasks than before.

It’s important to emphasize that for most women, these cognitive changes are temporary and **not** a sign of dementia or other neurological disorders.

# GYNDOKTOR

SPECIALLÆGE DR. MED. PERNILLE DANNESKIOLD LASSEN

---

## MENOPAUSAL HORMONE THERAPY (MHT)

Estrogen receptors are found in high concentrations in brain areas responsible for cognitive function, which may suggest that low estrogen levels may play a role in the experience of brain fog. The evidence on whether MHT has a positive effect on cognition, however, is inconclusive, as studies are limited and show mixed results.

Any potential benefit of MHT on cognitive symptoms may be closely linked to its effect on hot flashes and sleep quality. Other possible causes of brain fog, such as stress, anxiety, depression, or major life changes, should also be considered. A large review has shown that **cognitive behavioural therapy (CBT)** and **mindfulness** can significantly improve mood and concentration, including symptoms such as brain fog.

### MHT AND BONE HEALTH

There is broad agreement that estrogen—both alone and in combination with progesterone or progestins—slows age-related bone loss and reduces the risk of fractures by 20–40% in peri- and postmenopausal women. However, it is

uncertain whether this protective effect on bones continues after treatment is stopped. Therefore, prevention or treatment of osteoporosis is **not** a primary indication for MHT.

Supplementation with calcium and vitamin D from the perimenopausal stage is generally recommended.

### MHT AND CARDIOVASCULAR DISEASE

The effect of MHT on cardiovascular disease has been a subject of debate since the release of results from the large U.S. WHI (Women's Health Initiative) study in 2002. Below is a summary of the current recommendations.

When discussing MHT and cardiovascular health, it's important to distinguish between **venous blood clots** (in the legs or lungs) and **arterial blood clots** (such as heart attacks or strokes).

The risk of venous thrombosis increases with **oral estrogen**. The increased risk is eliminated with **transdermal estrogen** (e.g., patches or gel).

The risk of arterial events is more complex and appears to depend on **age**.

## MENOPAUSAL HORMONE THERAPY (MHT)

In women **under the age of 60**, MHT does not increase the risk of cardiovascular disease, and estrogen alone may even have a protective effect. In women **over the age of 60**, a slightly increased risk of blood clots is observed in the first 2–3 years after combined estrogen and progesterone treatment has been initiated. Women on estrogen-only therapy seem to have an unchanged risk. MHT is generally not recommended for women with known cardiovascular disease. Thus, MHT should not be used solely for either the prevention or treatment of cardiovascular disease.

### MHT AND DEMENTIA

The evidence on MHT and the risk of dementia is conflicting and based on a limited number of studies. Starting MHT **early** (before the age of 60) may be associated with a reduced risk, especially with estrogen-only therapy. Starting MHT **after the age of 65** appears to double the risk of developing dementia. It is, however, unclear whether MHT itself increases the risk, or whether women requiring long-term hormone therapy

have an underlying predisposition to neurodegenerative disease.

MHT should not be discontinued solely due to age (e.g., after 65) if it is still medically indicated.

### MHT AND BREAST CANCER

Like the area of cardiovascular disease, the relationship between MHT and breast cancer risk is a topic of discussion. Below is a short summary of the latest recommendations.

It is generally agreed that MHT slightly increases the risk of breast cancer. The risk is lowest with estrogen-only treatment and highest with combined estrogen and progestin therapy—particularly when progestin is added daily.

Estimated increase in risk after 5 years of treatment is:

- **0.5%** for estrogen-only treatment.
- **1.4%** for estrogen combined with **cyclic** progestin.

# GYNDOKTOR

SPECIALLÆGE DR. MED. PERNILLE DANNESKIOLD LASSEN

---

## MENOPAUSAL HORMONE THERAPY (MHT)

- **2.0%** for estrogen combined with **continuous** progestin or use of a hormonal IUD

After 10 years of treatment, the risk is approximately doubled, and the increased risk may persist for 10–15 years after stopping therapy.

Some studies suggest that bioidentical progesterone may carry a lower risk, but current evidence is too limited to make a general recommendation.

It's important to consider the increased breast cancer risk in context—many other lifestyle factors, such as being overweight, consuming alcohol, lack of exercise, smoking, family history, and number of pregnancies, also contribute significantly.

For example, the increased breast cancer risk from MHT is comparable to drinking two glasses of wine per day or having a BMI over 30.

### SUMMARY

Menopausal hormone therapy (MHT) is highly effective for relieving bothersome

menopausal symptoms such as **hot flashes, night sweats, sleep disturbances, and vaginal dryness.**

The evidence supporting MHT's effects on **joint pain, low libido, and cognitive symptoms ("brain fog")** is less robust. In cases of persistent low sexual desire where MHT alone is not sufficient, **testosterone therapy** may be considered.

In women below 60 years of age, **MHT does not appear to increase the risk of blood clots or dementia.** However, in women above this age, initiation of treatment seems to carry **an increased risk of these conditions**, particularly with the use of combined therapy (estrogen + progestin).

The risk of breast cancer is slightly increased with MHT. The risk increases with increasing treatment duration and is highest when progestin is added daily and lowest when estrogen is given alone.

In short, the use of MHT is a delicate balance where decision-making and plan should be made based on individual patient history and symptoms. Fear of potential risks should not prevent

# GYNDOKTOR

SPECIALLÆGE DR. MED. PERNILLE DANNESKIOLD LASSEN

---

## MENOPAUSAL HORMONE THERAPY (MHT)

healthcare professionals from offering MHT to women who may benefit from it. For many, it can make a significant difference in quality of life during the menopausal transition. On the other hand, MHT should be offered only when clearly indicated—there is no scientific evidence to support life-long use as a means of preventing age-related diseases.

### PRICE FOR PATIENTS WITHOUT AF REFERRAL FROM THEIR GP

Assessment, treatment and follow-up  
.....335 euro

### PAYMENT

You can pay with Mobile Pay or cash in the reception. Unfortunately, credit cards are not accepted. Foreign patients can transfer to IBAN account number DK 7690701633 002904 with beneficiary bank SWIFT code VRSPDK22. In case of bank transfer, payment should be received by the latest two days before the consultation. You will receive an invoice in the clinic.