Perimenopausal Women And Their Complaints

Luc Peeters, MSc.Ost.

The same author also published books on:

- Cranial Nerve Disorders and the Scientific Osteopathic Approach
- Fascial Chains
- Nutrition and Physical Complaints
- Posturology and its Scientific Osteopathic Approach
- Scientific Osteopathic Approach to Patients with Abdominal Complaints
- Scientific Osteopathic Approach to Patients with Cervical Pain
- Scientific Osteopathic Approach to Patients with Headache
- Scientific Osteopathic Approach to Patients with Knee or Foot Pain
- Scientific Osteopathic Approach to Patients with Low Back Pain
- Scientific Osteopathic Approach to Patients with Shoulder, Elbow, Wrist or Hand Pain
- Scientific Osteopathic Approach to the Immune System
- Scientific Osteopathic Approach to Vascularization and Oxygen Supply in Patients
- Understanding Pain and the Scientific Osteopathic Approach of Pain
- Understanding Stress and the Scientific Osteopathic Approach of Stress
- Understanding the Autonomic Nervous System and its Scientific Osteopathic Approach
- Perimenopausal Women and their Complaints
- Cerebrospinal Fluid and its Influence on Health
- Attention Deficit Disorder / Hyperactivity and the Scientific Osteopathic Approach
- Principles of Modern Osteopathy – Integration of Osteopathy into General Healthcare
- Evidence Based Practice
- Patient Information – What can Osteopathy do for You?

Contact: *Luc Peeters*

Mail: info@osteopathybooks.com

Perimenopausal Women and Their Complaints

1. Introduction

When we look at the population that visits osteopaths, physiotherapists and manual therapists with chronic musculoskeletal and other complaints, we see that a large number of these patients are women between 45 and 55 years old.

They come with a large variety of complaints, mostly with chronic low back pain, chronic cervical pain, muscle pain or other chronic musculoskeletal, visceral or psychological complaints.

The typical pattern is that they can be helped by osteopaths, but their complaints very often reoccur within days or weeks.

These patients all have in common that they are in their perimenopausal period of their lives.

Therefore, I think that these life events (premenopause, menopause and postmenopause) play a role in the fact that they have more physical complaints in that life period.

It is important for therapists to know the mechanism and consequences of perimenopause and menopause as well as the possibilities to help these patients more efficiently.

Addressing these patients' complaint area is good but often not sufficient to have an optimal and long-standing effect.

Therefore, treating the possible consequences of the perimenopausal period is essential.

2. Definitions

2.1. The Perimenopausal Period (or Premenopause)

The perimenopause is also called the menopause transition.

This period in the life of a woman begins several years before the menopause.

In this period, the ovaries gradually begin to make less estrogen.
The perimenopausal period starts in the woman's 40s. It can even start earlier.

The perimenopausal period lasts till the menopause. The menopause begins when the woman has 12 months without having their period.

The average length of the perimenopausal period is 4 years. There is however a variety in length from a few months to up to 10 years.

In the 1 or 2 years before the menopause, the drop in estrogen speeds up and this can give menopausal symptoms.

The time around the menopause is sometimes also called 'the menopause transition'.

2.2. The Menopause (Climacteric)

This is the period in a woman's life when she stops having periods and is no longer able to get pregnant in a natural way (loss of ovarian follicular function).

The stop of periods can come suddenly or gradually over the time of several months.

Menopause is a natural part of life and aging and is seen between the age of 45 – 55.

The average age of menopause onset is 51 years, with approximately 1% of women transitioning before the age of 40 years and 5% after the age of 55 years.

Menopause is considered premature when it occurs before the age of 40 years.

Since the average age expectancy of women is around 80, women are 30% of their lives in their postmenopausal period.

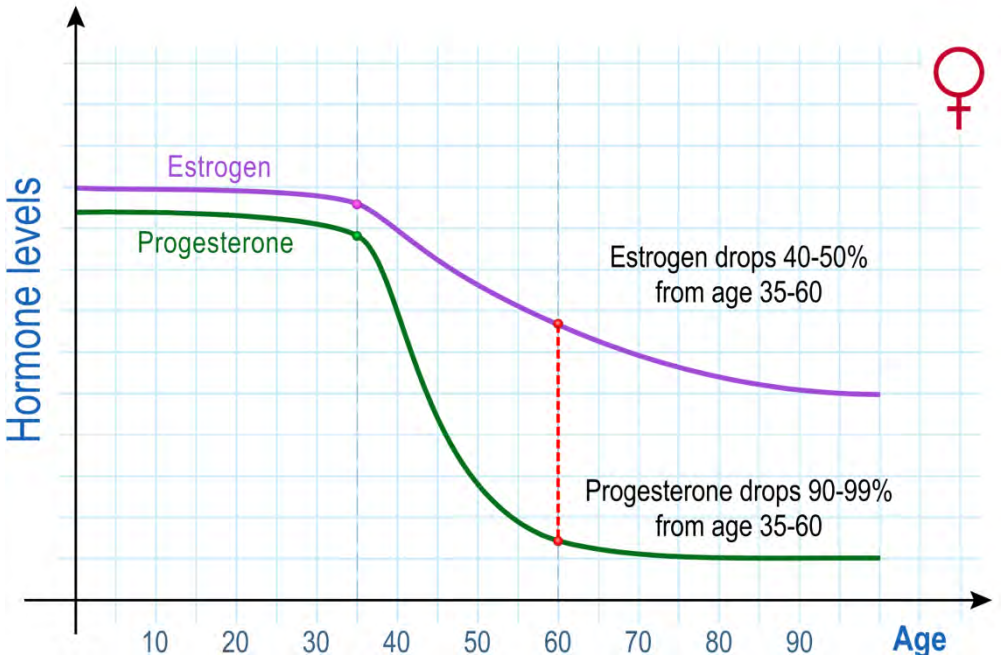


Figure 2 - Estrogen and progesterone production in life

2.3. The Postmenopausal Period

This is the time after the menopause has occurred.

When the menopause occurs, the postmenopausal period is for the rest of the woman's life.

Women in their postmenopause are at an increased risk for some health conditions such as:

- Osteoporosis.
- Atherosclerosis.
- General loss of tone and urinary incontinence.
- Weight gain.

- Menstruation in anovulatory cycles.
- Growth of the endometrium during the menstrual cycle.
- Rhythmic contractions of uterus and fallopian tube.
- Increase of cervical mucous and alkaline watery secretion with lowered viscosity which enhances sperm penetration.
- Light anabolic effect.
- Retards bone resorption.
- Water and salt retention.
- Glucose tolerance.
- Decreases plasma LDL cholesterol.
- Increases HDL cholesterol.
- Raised HDL/LDL ratio.
- Blood coagulability.
- Increased cholesterol secretion through the gallbladder.
- Vasodilatation.
- Cardio protection.

Possible side effects of estrogen:

- In male:
    - Suppression of libido.
    - Gynecomastia.
    - Feminization.
    - Weight gain in the abdominal region.
- In children:
    - Fusion of epiphyses and reduction of adult stature.
- Acne.
- Growth of existing breast cancer.
- Increased incidence of gallstones.
- Worsening of migraine.
- Worsening of epilepsy.
- Worsening of endometriosis.
- Edema.
- Breast tenderness.
- Increased skin pigmentation.
- Breakthrough bleeding.
- Nausea.
- Implantation failure.

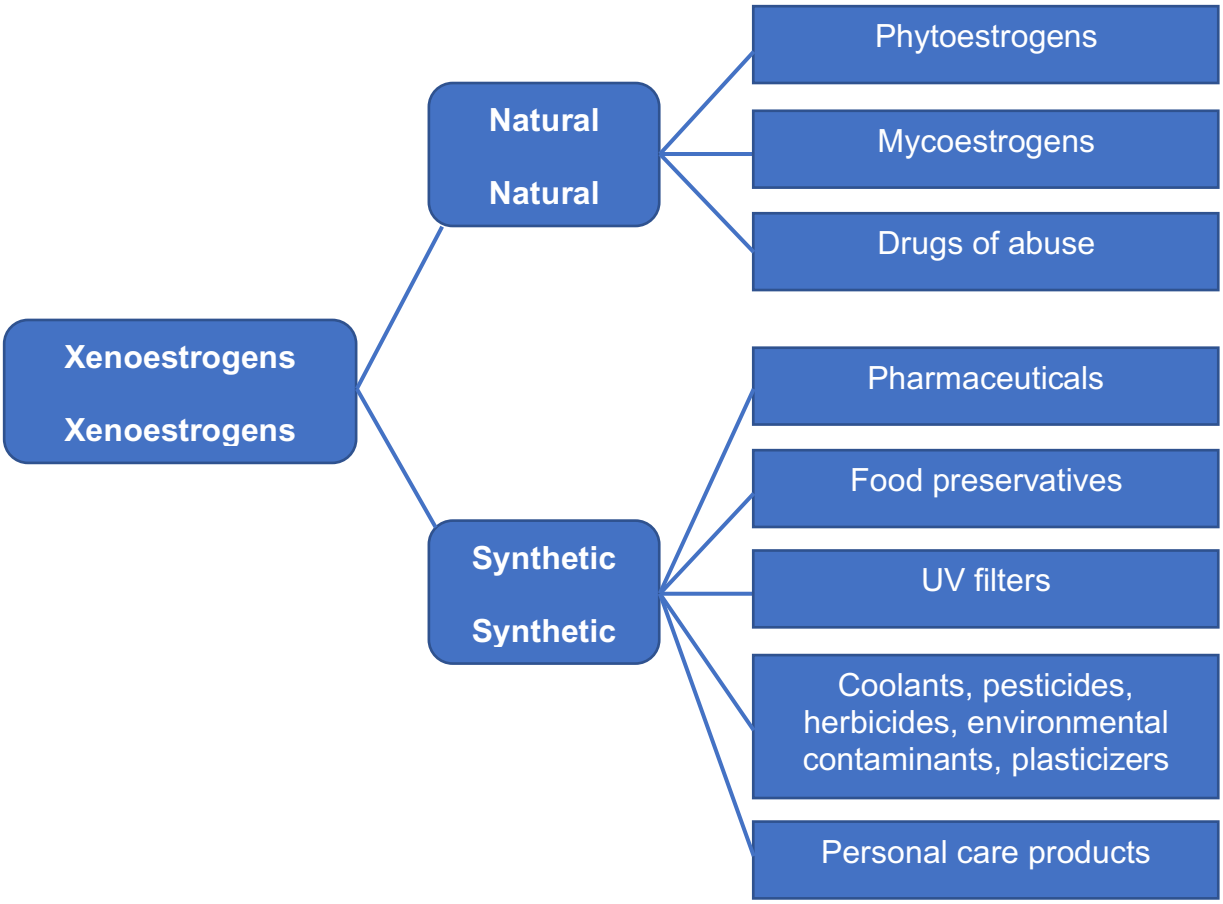


Figure 16 - Xenoestrogens

Note on the oral contraceptive pills:

- **There are 4 types of contraception pills:**
  - Combined pills:
    - Contain estrogen and progestin.
    - Most common.
    - Action:
      - Suppress hormones responsible for the ovulation:
        - Estrogen inhibits the secretion of FSH.
        - Progestin inhibits the secretion of LH and prevents ovulation.
      - Both thicken the cervical mucus to block sperm.
  - Phased pills.
  - Progestin only pills:
    - Only 1 hormone.
    - Better for women that have high estrogen symptoms.
  - Emergency pills:
    - Morning after pill.
    - Increased dose of estrogen and progestin.

- The reversal phase.
- The formation phase.

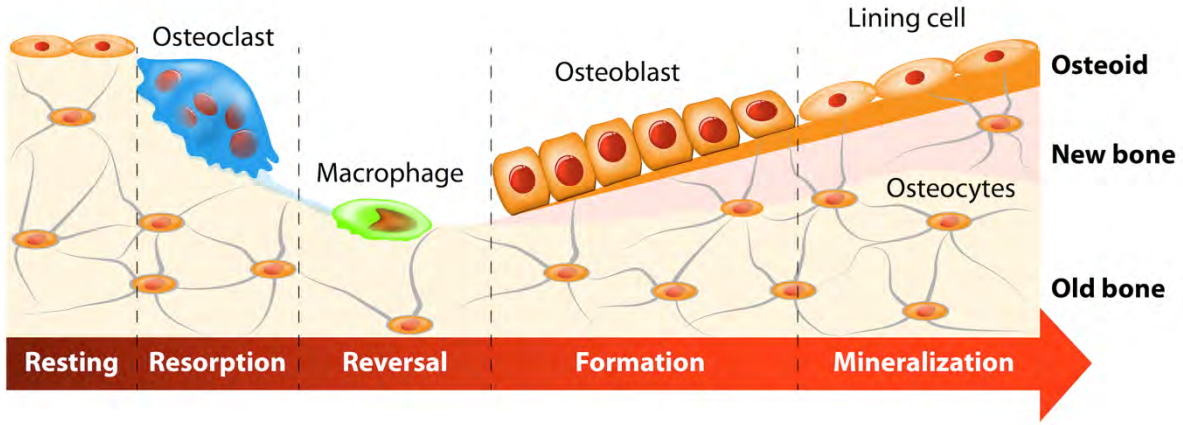


Figure 38 - Bone remodelling process

This process is regulated by several hormones, including parathyroid hormone, calcitonin, 1,25(OH)2-vitamin D3, and estrogen.

Estrogen function in this process:

- Lowering the sensitivity of bone mass to PTH (parathyroid hormone), thus reducing bone resorption.
- Increasing the production of calcitonin, thus inhibiting bone resorption.
- Accelerating calcium resorption by the intestine.
- Reducing the calcium excretion from the kidney.
- Estrogen can also have direct effects on the bone since there are estrogen receptors in the bone.

In the menopause, the normal bone turnover is impaired by estrogen deficiency.

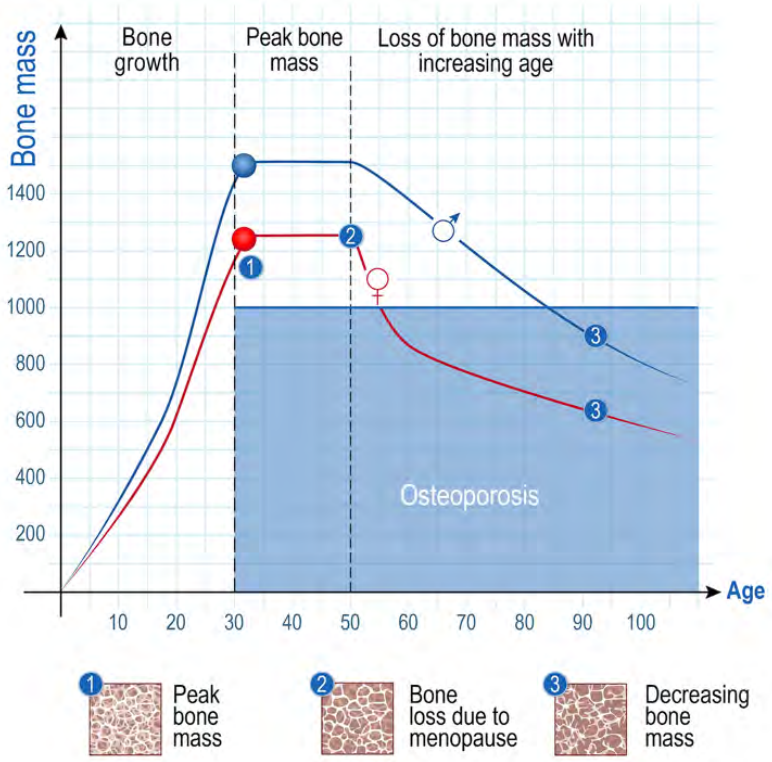


Figure 39 - Bone mass and age

The osteoclastic resorption activity increases while the osteoblastic activity decreases.

There are two phases of bone loss in women:

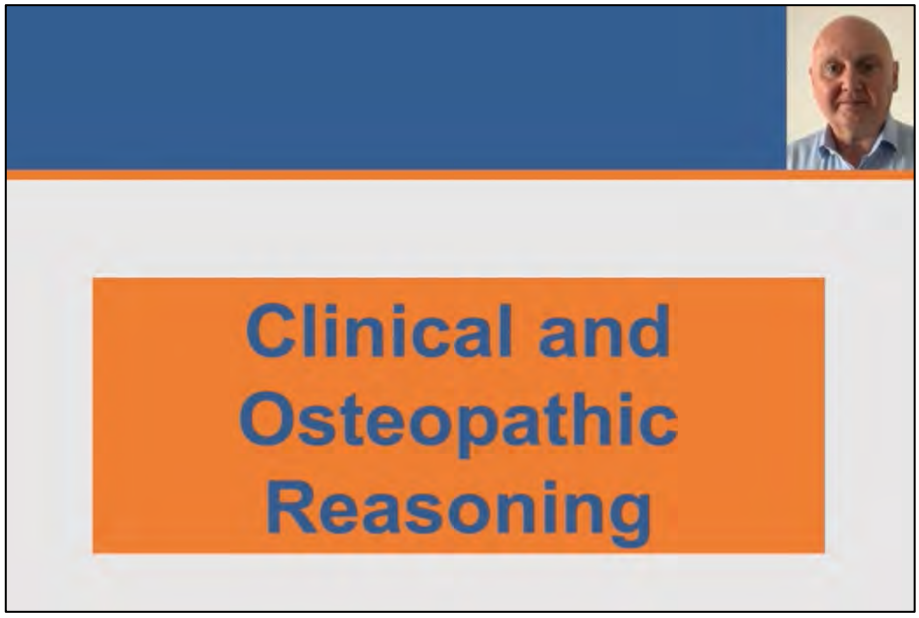
- **The first** occurs predominantly in trabecular bone and starting at menopause. It results from estrogen deficiency and leads to a disproportionate increase in bone resorption as compared with formation. This phase could be defined as menopause related bone loss.
- **After 4 – 8 years,** the second phase exhibits a persistent, slower loss of both trabecular and cortical bone, and is mainly attributed to reduced bone formation. This is age related bone loss, which is the only phase that also happens in men.

Women in their perimenopausal life period with low back pain, always have to be suspected for eventual small bone fractures.

9. Overall Treatment of Women in the Perimenopausal Period of their Life

Perimenopausal patients with complaints have to be treated with 2 major treatment aims:

1. **The complaint region must be treated to improve:**
    a. The mechanics.
    b. The neurology.
    c. The vascularization and oxygenation.
    d. The metabolic condition.
    This is in all possible details described in my other books.
    The osteopathic principles as well as the general rules for clinical and osteopathic reasoning are followed.



Video 1 - Clinical and osteopathic reasoning

2. **The possible perimenopausal complications must be addressed in their different aspects (possibly different for all patients):**
    a. Physically:
        i. Mobility of the regions in relation with estrogen and progesterone production:
            1. Ovaries, uterus and pelvis (as well visceral as musculoskeletal (iliosacral mobility).
            2. Brain, skull, upper cervical region, membranous system of the central nervous system.

d. Body weight:
    i. Go for a healthy weight, BMI and waist circumference.
e. Balancing the autonomic nervous system.
f. Psychological and spiritual equilibrium.

In patients in their perimenopausal period of life it is important to evaluate which systems are most in dysfunction.

This is to make a hierarchy in the treatment goals and plan.

The possibilities are:

- The health of the local complaint area.
- The vascular and oxygenation system.
- The mechanical system.
- The immune system.
- The neurological system.
- The hormonal axis regions.
- Body weight.

It is impossible for the osteopath to treat these patients alone. Treating perimenopausal women needs a multidisciplinary approach.

The difficulty is often that it is not easy to find the priorities.

Therefore, we suggest having a few specific questionnaires of perimenopausal women (+45 years of age) beside the usual case history.

The questionnaires can be filled in before the consult.

I would start with the general systemic questionnaire before using the specific questionnaires on stress and depression.

Note

In the above summary, different treatment goals or aims are given. The specific assessment and treatment tests and techniques are described in detail in my other books.

GENERAL SYSTEMIC QUESTIONNAIRE

Privacy policy: *the data that you provide in this questionnaire will only be used for internal purposes to make up the most effective osteopathic treatment.*

No data will be given to third parties, for whatever reason.

The electronic system in which your data are collected is safe and hacking protected.

The aim of this questionnaire is to give your osteopath a good image of your general health. This is important because osteopaths asses and treat holistically (the whole patient).

Detailed questions on your specific complaint will be asked at the first consultation.

If one of the questions is not clear, leave the answer open and ask your osteopath at the first consultation.

SYSTEMIC QUESTIONNAIRE BEFORE OSTEOPATHIC TREATMENT

Name		**M or F**		
Age		**Date**		
Weight		**Height**		
BMI				
System	**Question**			**Specify**
Lungs	Are there known lung complaints/diseases?	Yes	No	Which ones?
	Do you smoke?	Yes	No	
	Do you take medication for your lungs?	Yes	No	Which ones?
	Are you short of breath when climbing stairs?	Yes	No	
	Do you have respirational problems, lung, nose, bronchi infections regularly?	Yes	No	
	Is there hay fever, allergies, asthma?	Yes	No	Which ones?
	Is there pain during deep in- our exhalation?	Yes	No	

THE PERCEIVED STRESS QUESTIONNAIRE (PSQ)

Privacy policy: *the data that you provide in this questionnaire will only be used for internal purposes to make up the most effective osteopathic treatment.*

No data will be given to third parties, for whatever reason.

The electronic system in which your data are collected is safe and hacking protected.

The aim of this questionnaire is to give your osteopath a good image of your general health. This is important because osteopaths asses and treat holistically (the whole patient).

Detailed questions on your specific complaint will be asked at the first consultation.

If one of the questions is not clear, leave the answer open and ask your osteopath at the first consultation.

Date…….

Name……..

Gender…M…….F……..Other…….

Age……..

Instructions

For each sentence, circle the number that describes how often it applies to you in the last month.

Work quickly without bothering to check your answers.

	Almost never	Sometimes	Often	Usually
1. You feel rested	4	3	2	1
2. You feel that too many demands are being made on you	1	2	3	4
3. You are irritable or grouchy	1	2	3	4
4. You have too many things to do	1	2	3	4
5. You feel lonely or isolated	1	2	3	4
6. You find yourself in situations of conflict1.	1	2	3	4
7. You feel you're doing things you really like	4	3	2	1
8. You feel tired	1	2	3	4
9. You fear you may not manage to attain your goals	1	2	3	4
10. You feel calm	4	3	2	1
11. You have too many decisions to make	1	2	3	4
12. You feel frustrated	1	2	3	4
13. You are full of energy	4	3	2	1
14. You feel tense	1	2	3	4
15. Your problems seem to be piling up	1	2	3	4
16. You feel you're in a hurry	1	2	3	4
17. You feel safe and protected	4	3	2	1
18. You have many worries	1	2	3	4
19. You are under pressure from other people	1	2	3	4
20. You feel discouraged	1	2	3	4
21. You enjoy yourself	4	3	2	1
22. You are afraid for the future	1	2	3	4
23. You feel you're doing things because you have to (…)	1	2	3	4
24. You feel criticized or judged	1	2	3	4
25. You are lighthearted	4	3	2	1
26. You feel mentally exhausted	1	2	3	4
27. You have trouble relaxing	1	2	3	4
28. You feel loaded down with responsibility	1	2	3	4
29. You have enough time for yourself	4	3	2	1
30. You feel under pressure from deadlines	1	2	3	4

Trouble falling or staying asleep, or sleeping too much?				
Feeling tired or having little energy?				
Poor appetite or overeating?				
Feeling bad about yourself - or that you are a failure or have let yourself or your family down?				
Trouble concentrating on things, such as reading the newspaper or watching television?				
Moving or speaking so slowly that other people could have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual?				
Thoughts that you would be better off dead, or of hurting yourself in some way?				

Total score = ……../27

Depression Severity:

- 0-4 none.
- 5-9 mild.
- 10-14 moderate.
- 15-19 moderately severe.
- 20-27 severe.

PHQ-9 score ≥10 had a sensitivity of 88% and a specificity of 88% for major depression.

Bibliography

1. Bacon J.L. (2017) The Menopausal Transition. Obstet. Gynecol. Clin. North Am. Jun. 44(2): pp. 285-296.
2. Bellver J., Rodríguez-Tabernero L., Robles A., Muñoz E., Martínez F., Landeras J., García-Velasco J., Fontes J., Álvarez M., Álvarez C. & Acevedo B. Group of interest in Reproductive Endocrinology (GIER) of the Spanish Fertility Society (SEF). (2018) Polycystic ovary syndrome throughout a woman's life. J. Assist. Reprod. Genet. Jan. 35(1): pp. 25-39.
3. Brinton R.D., Yao J., Yin F, Mack W.J. & Cadenas E. (2015) Perimenopause as a neurological transition state. Nat. Rev. Endocrinol. 2015 Jul. 11(7): pp. 393-405.
4. Brinton R.D., Yao J., Yin F., Mack W.J. & Cadenas E. (2015) Perimenopause as a neurological transition state. Nat. Rev. Endocrinol. Jul. 11(7): pp. 393-405.
5. Bromberger J.T. & Epperson C.N. (2018) Depression During and After the Perimenopause: Impact of Hormones, Genetics, and Environmental Determinants of Disease. Obstet. Gynecol. Clin. North Am. Dec. 45(4): pp. 663-678.
6. Bromberger J.T., & Epperson C.N. (2018) Depression During and After the Perimenopause: Impact of Hormones, Genetics, and Environmental Determinants of Disease. Obstetrics and gynecology clinics of North America, 45(4), pp. 663-678.
7. Cheryl S., Watson, Yow-Jiun Jeng & Jutatip Guptarak. (2011) Endocrine disruption via estrogen receptors that participate in nongenomic signaling pathways. The Journal of Steroid Biochemistry and Molecular Biology, Volume 127, Issues 1-2, October 2011, Pages 44-50.
8. Clayton A.H. & Ninan P.T. (2010) Depression or menopause? Presentation and management of major depressive disorder in perimenopausal and postmenopausal women. Primary care companion to the Journal of clinical psychiatry, 12(1).
9. Cui J., Shen Y. & Li R. (2013) Estrogen synthesis and signaling pathways during aging: from periphery to brain. Trends in molecular medicine, 19(3), pp. 197-209.
10. Davis S.R., Castelo-Branco C., Chedraui P., Lumsden M.A., Nappi R.E., Shah D. & Villaseca P. (2012) Writing Group of the International Menopause Society for World Menopause Day. Understanding weight gain at menopause. Climacteric. Oct.15(5): pp. 419-429.
11. Davis S.R., Castelo-Branco C., Chedraui P., Lumsden M.A., Nappi R.E., Shah D. & Villaseca P. (2012) Writing Group of the International Menopause Society for World Menopause Day 2012. Understanding weight gain at menopause. Climacteric. 2012 Oct. 15(5): pp. 419-429.

58. Sturdee D.W. (2008) The menopausal hot flush – anything new? Maturitas. 2008; 60: pp. 42-49.
59. Thammacharoen S., Geary N., Lutz T.A., Ogawa S. & Asarian L. (2009) Divergent effects of estradiol and the estrogen receptor-alpha agonist PPT on eating and activation of PVN CRH neurons in ovariectomized rats and mice. Brain Res. 2009 May 1;1268: pp. 88-96.
60. Vincent K. & Tracey I. (2008) Hormones and their Interaction with the Pain Experience. Reviews in pain, *2*(2), pp. 20-24.
61. Weber M.T., Maki P.M. & McDermott MP. (2014) Cognition and mood in perimenopause: a systematic review and meta-analysis. J. Steroid. Biochem. Mol. Biol. 2014 Jul. 142: pp. 90-98.
62. Willi J. & Ehlert U. (2019) Assessment of perimenopausal depression: A review. J. Affect. Disord. Apr. 15; 249: pp. 216-222.
63. Woods N.F. & Mitchell E.S. (2005) Symptoms during the perimenopause: prevalence, severity, trajectory, and significance in women's lives. Am. J. Med. Dec. 19; p. 118 Suppl 12B: pp. 14-24.

Acknowledgment

I am grateful to those colleagues who knowingly or unknowingly assisted in the development of this book.

I also acknowledge that the constant questioning by students has significantly contributed to the development of the material in this book.

My greatest debt of gratitude goes to those family members and good friends whose tireless support made the writing of this book possible.

Luc Peeters

Master of Science in Osteopathy (MSc.Ost) - UAS

Luc Peeters is an osteopath since 1985. He was the Joint-Principal of the largest Academy of Osteopathy in Europe from 1987 till 2020. He provided curricula, syllabuses and academic recognition from several universities.

This book gives a practical overview of the condition of perimenopausal women and their age-related problems and complaints.

The theory and procedures in this book are checked on their scientific background and esotericism is avoided.

Author & Publisher: Luc Peeters
Mail: info@osteopathybooks.com