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Perimenopausal depression

Background

DEPRESSIVE symptoms are common in women experiencing transition to menopause. Some studies have described up to 16-fold increases in the development of depression in women aged between 45 and 52.[1,2]

Australian statistical data show that "the highest age-specific suicide rate for females in 2015 was observed in the 45-49 age group, with 82 deaths (10.4 per 100,000), followed by the 50-54 year age group".[3]

Completed suicide statistics in middle-aged women have not attracted specific attention in the healthcare area or in the general community. The increase in suicides in this group, compared with other age groups of women, should alert us to think about the contributing factors leading to this tragic outcome.

These factors include the biological changes in the gonadal hormones associated with the transition to menopause.

Most women do not experience significant mental ill health during the transition to menopause, but nonetheless, an estimated 20% of perimenopausal women will present to their primary healthcare physicians with depressive symptoms that may not be recognised specifically as 'perimenopausal depression'.[4]

The Penn Ovarian Aging Study, a cohort study, found depressive symptoms to be increased during the menopausal transition and decreased after menopause.[5] Researchers conducting the Harvard Study of Moods and Cycles followed up premenopausal women aged 36-44 with no history of major depression for nine years.[6] They found that twice as many women who became perimenopausal had clinically significant depressive symptoms compared with women who had not yet entered the transition phase.

The perimenopausal period, which marks a major transition in reproductive life, can be a challenging time for many women as a result of gonadal hormone fluctuations, plus physical and mental issues related to ageing.

Psychosocial impairment, in particular, can result from depressive symptoms that are severe and often unresponsive to standard treatment. This article aims to inform clinicians about the varying presentations and different treatment modalities for women in their mid-40s to early 50s experiencing perimenopausal depression.

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INSIDE

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Definition

THE WHO defines the perimenopause as "the time immediately preceding the menopause, beginning with endocrine, biologic and clinical changes, and ending a year after the final menstrual period".[7] Perimenopause is diagnosed clinically on the basis of varying menstrual cycle lengths and can have accompanying classical menopausal symptoms, such as hot flushes, sleep disturbance and vaginal dryness.[8]

The perimenopause, which has a median age of onset of 47.5 years, has distinct endocrine characteristics.

The perimenopause, which has a median age of onset of 47.5 years, has distinct endocrine characteristics. Early perimenopause is a period of high gonadotropin (FSH and LH) levels, as well as increased oestradiol secretion.[9] In contrast, later perimenopause is a time of high FSH levels and decreased oestradiol secretion.[10]

During the menopause transition, one in four women experience severe vasomotor symptoms (hot flushes and night sweats) and one in three experience severe psychological symptoms (depression and anxiety).[12] Symptoms can be severe and last for many years.

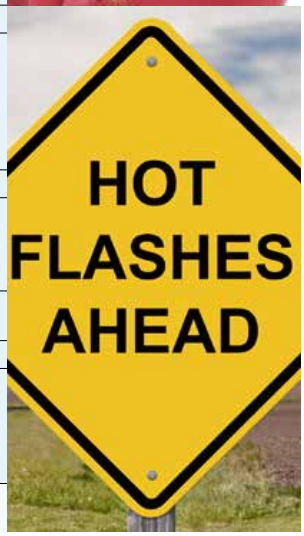
Women who experience early severe vasomotor or psychological symptoms — that is, onset of significant symptoms up to three years before the menopause — are more likely to experience a reduction in their symptoms by their fourth postmenopausal year, whereas women with later-onset severe symptoms are more likely to have symptoms that persist for several years.[12]

Figure 1. The Stages of Reproductive Aging Workshop (STRAW + 10) staging system for reproductive aging in women.[11]
Adapted from Harlow S et al. Menopause 2012; 19:387-95.

	Menarche						Final menstrual period (0)			
Stage	-5	-4	-3b	-3a	-2	-1	+1a	+1b	+1c	+2
Terminology	Reproductive				Menopausal transition		Post menopause			
	Early	Peak	Late		Early	Late	Early			Late
					Perimenopause					
Duration	*Variable*				*Variable*	1-3 years	2 years (1+1)	3-6 years		*Remaining lifespan*
Principal criteria										
Menstrual cycle	Variable to regular	Regular	Regular	Subtle changes in flow/length	Variable length Persistent ≥7day difference in length of consecutive cycles	Interval of amenorrhoea of > = 60 days				
Supportive criteria										
Endocrine FSH AMH Inhibin B			Low Low	Variable* Low Low	↑Variable* Low Low	↑>25IU/L** Low Low	↑ Variable Low Low	Stabilises Very low Very low		
Antral follicle count			Low	Low	Low	Low	Very low	Very low		
Descriptive characteristics										
Symptoms						Vasomotor symptoms *Likely*	Vasomotor symptoms *Most likely*			Increasing symptoms of urogenital atrophy

*Blood draw on cycle days 2-5 ↑= elevated

**Approximate expected level based on assays using international pulmonary standard



Symptoms and signs

"PERIMENOPAUSAL depression encompasses both new onset (first episode) depression occurring during perimenopause, as well as a relapse of depression during perimenopause in women with a history of depression. Perimenopausal depression is increasingly recognised as a new subtype of depression with specific clinical characteristics.

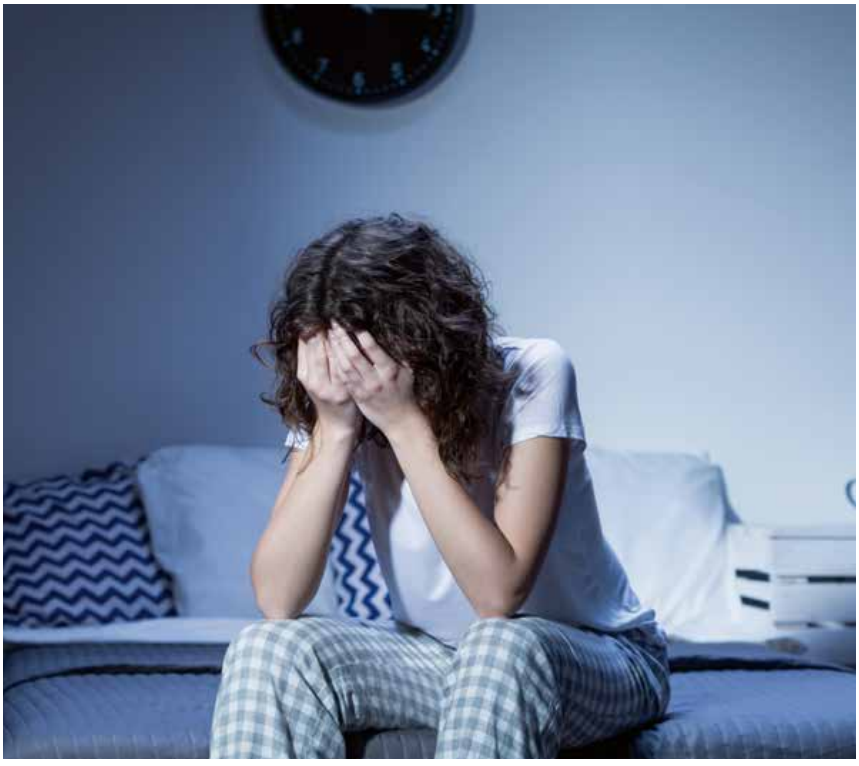
"Current treatments for perimenopausal depression have high failure rates, multiple adverse effects and potentially damaging long-term consequences."[13]

According to DSM5, there are many overlapping symptoms between major depressive disorder and perimenopausal depression. The box lists some of the more typical symptoms experienced in perimenopausal depression.

Research undertaken to determine if the symptoms of perimenopausal depression were different compared with major depressive disorder experienced by women in their childbearing years showed that the two types of depression did have different key symptoms.

Perimenopausal depression was marked by often milder sadness symptoms of depression, but with "increased anger, reduced sleep quality and increased fatigue that was independent of sleep quality".[14]

Typical features of perimenopausal depression
Decrease in self-esteem and worth
Weight gain
Impaired memory and concentration
Low libido
Poor sleep
Fatigue independent of sleep quality
Disconnected
Irritability and anger



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Clinical presentation

THE physical symptoms of the menopause often present much later (up to five years) than the psychological symptoms. This delay can make the diagnosis of perimenopausal depression very difficult.

It is therefore worth considering whether changes in mental state for women in their mid-40s could be related to perimenopausal changes, which may present with physical symptoms later on.

Perimenopausal depressive symptoms

As discussed earlier, perimenopausal depression and major depressive disorder have overlapping symptoms, but there are some key differences in the quality and type of symptoms experienced by women in the perimenopause. The specific perimenopausal symptoms are listed in table 1.

Table 1. Specific perimenopausal symptoms

Feature	Considerations
Low energy	Despite reasonable sleep at night, many women describe constant exhaustion.
Paranoid thinking	This is of a different quality from the true delusional paranoia seen in psychosis; common paranoid ideation includes thoughts such as "I'm sure they are all talking behind my back about how hopeless I am at my job".
Irritability	This is a depressive equivalent symptom where, instead of being sad, the woman can express anger by snapping, have verbal outbursts over minor incidents or even have rage responses; importantly, the irritability is usually out of character for the woman.
Decreased self-esteem	This can compound previous poor self-esteem issues and can present with marked self-denigratory comments; in its worst form, the woman can have no self-worth at all to the point of believing that the world would be better off without her, which can lead to suicide.
Isolation	Social and occupational withdrawal, feeling isolated, 'in a bubble' even when with others.
Anxiety	Heightened anxiety or panic attacks when doing ordinary, routine and familiar tasks.
Somatic symptoms	Frequent headaches and muscle and joint pains limiting activity, or severe aches and pains requiring pain relief and preventing activity.
Sleep disturbance	Waking up several times a night because of hot flushes and sweating, plus difficulty returning to sleep.
Weight	Continuing weight gain and abdominal fat deposition despite dietary restriction and increasing exercise, or even major weight gain (more than 6kg) with abdominal, breast, hip and thigh fat deposition.
Sexual interest	Decreased libido and discomfort with sexual activity.
Memory	Impaired memory, leading to dysfunction.
Concentration	Problems concentrating on reading, watching TV/films and work tasks.

Source: The MENO-D questionnaire.

The physical and mental symptoms of menopause

- Vasomotor symptoms
- Vaginal dryness
- Joint pains
- Urinary incontinence
- Uterine bleeding
- Gastrointestinal tract bloating
- Hypercholesterolaemia
- Sleep problems
- Weight gain
- Decreased sexual activity
- Anxiety
- Depression
- Change in cognitive function

Specific issues related to perimenopausal symptoms

Insomnia is extremely common in menopause transition, and 40-50% of perimenopausal women report sleep problems.[16] Oestrogen deficiency and decline in melatonin and growth hormone have all been proposed as mechanisms causing insomnia in perimenopausal women.[17,18]

The noted rise in core body temperature during menopause also impacts adversely on the quality of sleep. Exogenous oestrogen has been shown to improve both subjective and objective sleep, attributed to a decrease in hot flushes.[17]

Poor sleep, in both quality and quantity, can have profound negative impacts on mood and cognition, as well as metabolic factors, increasing the risk of obesity and diabetes.[19] The perimenopausal and menopausal woman who experiences chronic sleep deprivation can have a poor quality of life because of the deleterious effects of insomnia on her work, health and relationships.

Alcohol abuse is another common complication of perimenopausal depression and anxiety. Many women who experience insomnia, anxiety and stresses at work or in relationships self-medicate with alcohol. As well as compounding anxiety and depressive symptoms, regular and excessive alcohol use has significant physical adverse effects on the woman.

Figure 2. The MENO-D questionnaire.

MENO- D

A rating scale to detect depression in menopause

MAPrc We mend minds

Professor Jayashri KULKARNI
Monash Alfred Psychiatry research centre
Melbourne

Subject's name or code: ..... Date: .....

A – LOW ENERGY
0 No change in energy, feel active all day
1 More tired after activity than previously
2 Decreased activity because of tiredness
3 Feel tired most of the time despite resting, decreased activity
4 Continually feeling exhausted, even small tasks such as brushing hair feel draining. "Bone weary, mind weary"

B – PARANOID THINKING
0 No Paranoid thinking
1 Increasingly worried that others think badly of you
2 Suspicious that people at work or home think badly of you
3 Convinced that others have a low opinion of you and are trying to replace you

C – IRRITABILITY
0 No irritability
1 Mild irritability
2 Increased irritable response to minor incidents
3 Anger expressed by "snapping", verbal outbursts over minor incidents
4 Rage, major verbal outbursts over minor incidents

D – SELF ESTEEM
0 Good self esteem or no change in self-esteem
1 Slight decrease in self-esteem
2 Poor self-esteem with no reality base
3 Very poor self-esteem in all life domains, with marked self-denigratory comments
4 No self-worth at all to the point of believing that the world would be better off without you. (NB – this rating must then lead to further questions about suicide planning, actions and deliberate self harm)

E – ISOLATION
0 Socialize normally
1 Decreased socializing
2 Disinterested in socializing
3 Social and occupational withdrawal
4 Feeling isolated, "in a bubble" even when with others

F – ANXIETY
0 No new anxiety
1 Increased anxiety when performing in public
2 Highly anxious when doing new tasks
3 Heightened anxiety when doing routine and familiar tasks
4 Panic attacks, highly anxious when doing ordinary and familiar tasks

G – SOMATIC SYMPTOMS
0 No physical symptoms
1 Increased muscle aches, joint pains on exercise
2 Increased leg, back and joint pains with little exertion
3 Frequent headaches, muscle and joint pains limiting activity
4 Severe aches and pains requiring pain relief and preventing activity

H – SLEEP DISTURBANCE
0 No sleep problems
1 Sleep broken by brief waking once or twice per night, but easily return to sleep
2 Sleep broken by waking several times per night, but easily return to sleep
3 Waking up three or more times per night due to hot flashes and sweating, plus difficulty returning to sleep
4 Sleeping two or less hours per night consistently. Sweating, hot flashes, feeling hot then cold, interrupting sleep all night

I – WEIGHT
0 No change in weight
1 Mild weight gain (1-2kg)
2 Moderate weight gain despite no change in diet or exercise (3-6kg)
3 Continuing weight gain and abdominal fat deposition, despite dietary restriction and increasing exercise
4 Major weight gain (>6kg) with abdominal, breast, hip and thigh fat deposition

J – SEXUAL INTEREST
0 No change in libido
1 Mild decrease in libido
2 Diminished libido
3 Decreased libido and discomfort with sexual activity
4 Loss of interest in all sexual activity

K – MEMORY
0 No change in memory
1 Mild problems remembering names and numbers
2 Need to make lists to function at work or home
3 Impaired memory leading to dysfunction
4 Severe loss of memory leading to inability to function

L – CONCENTRATION
0 No change in concentration
1 Mild problems with concentrating on reading
2 Mild problem with concentration on reading and watching TV/films
3 Marked problems concentrating on reading and watching TV/films
4 Unable to focus on any tasks

SCORING

Points are indicated as the numerical value of each possible symptom area (A-L) – then the total is added.

The minimum score is 0 and the maximum is 48 points. Between 20-24 points is considered to denote mild perimenopausal depression, needing onward monitoring.

Between 24-32 points suggests moderate perimenopausal depression needing treatment.

At 32 points and above, the woman is considered to have severe perimenopausal depression needing treatment.

Aetiology

AS with most health conditions, the aetiology is best considered in a holistic framework. The term 'biopsychosocial' provides an integrated model for consideration of the aetiology of perimenopausal depression.

Biological factors

Depression is significantly linked to times of hormonal change in women, such as at puberty, premenstrually, in the post-partum period and around the menopause transition.[20,21] In part, fluctuating and declining oestrogen levels are a likely cause of depression during perimenopause. Steroid hormones, such as oestrogen, act in the CNS by means of various mechanisms.

Oestrogen modulates the impacts of serotonin and norepinephrine, which are thought to be the key neurotransmitters most related to the development of depression. Changes in oestrogen levels, perhaps due to mechanisms involving these neurotransmitters, may be related to depressive symptoms in the menopausal transition of some women.

However, absolute levels of gonadal hormones are not correlated with depression. Oestrogen and progesterone levels do not distinguish a woman with depression from one without depression.

Numerous social theories have been put forward to explain why women may become depressed during perimenopause.

When hormone concentrations were measured in perimenopausal or postmenopausal women with depression, no abnormal levels were found.[23] Rather, a certain subset of women seem to be predisposed to experience mood disturbances triggered by hormonal fluctuations.

This subset includes women with a history of mood disorders, premenstrual and postnatal mood-related symptoms or a female family history of mood disorders related to hormone events.[24] Of course, women with no previous history of mood disorders at all can develop severe perimenopausal depression de novo.

The risk of depression appears to be higher during perimenopause, when hormone levels are changing, than post-menopause, when oestrogen and progesterone levels are low but stable.[4,25] Women who experience surgical or early menopause appear to have increased risk of perimenopausal depression.[4,21]

Psychological factors

Individual coping styles, early life trauma, societal roles and expectations may contribute to the heightened rate of depression in women. An Australian study of perimenopausal women showed more depression in women with the following stressors:

- Mood disorder before menopause, including premenstrual dysphoric disorder, postnatal depression and major depressive disorders
- Negative attitude towards menopause and ageing
- Troubling vasomotor symptoms
- Smoking
- Little or no exercise
- No partner or negative feelings towards partner
- High burden of care with aged parents, children
- Poor self-perceived health
- Interpersonal, employment stress[4,21,25]

Social factors

Numerous social theories have been put forward to explain why women may become depressed during perimenopause. Some of these are related to a change in the childbearing role with obvious loss of fertility, which may be associated with a loss of an essential meaning of life. In societies that highly value youth, perimenopausal depression is increased.

However, in societies where elders are valued, women tend to report having fewer symptoms at the menopause transition.[26-28]

Investigations

HAVING taken a clinical history (perhaps using the MENO-D questionnaire) and then performing both a physical and mental state examination, it is important to consider some relevant investigations.

A differential diagnosis may be hypothyroidism. Therefore, a thyroid function test should be performed.[29] It is important to continue to monitor patients for hypothyroidism because thyroid disease is an independent risk factor for depression in menopausal women.

FSH and LH levels should also be measured. Ovarian production of inhibin and oestrogen declines during perimenopause — hence FSH and, later, LH levels begin to increase. An FSH level higher than 40 IU/L is often used as a marker of menopausal changes.

It is important to remember that a woman may begin to notice mental state changes well before laboratory values reflect the changes, and it is crucial that her observations are taken into account when planning treatment options.

Other investigations can be done to rule out anaemia and vitamin D and B12 deficiency, which can be associated with depressive-type symptoms.

Similarly, since the risk of cardiovascular disease rises after menopause, an ECG plus blood lipids are useful baseline tests. Women under 50 may have a breast ultrasound if you are considering the use of hormone treatment. In women over 50, a mammogram and breast ultrasound are useful baseline measures. Dual-energy X-ray absorptiometry scanning is indicated to evaluate BMD as an important health measure.[29]

Management

IN treating mood disorders that arise in association with menopause, primary health physicians, gynaecologists, endocrinologists, psychologists and psychiatrists may all be required.

Psychosocial treatment

If the perimenopausal depression is clearly related to employment or relationship issues, then psychotherapy is an important intervention. Either a psychologist or GP with mental health expertise can provide required supportive or exploratory therapy.

Other useful approaches include discussions about regular exercise, mindfulness techniques, yoga and dietary advice. Minimising alcohol use is also very important for mental state and physical health impacts.

Drug treatment

Drugs used to treat perimenopausal depression usually include antidepressants and/or gonadal hormones. The order in which they are tried often depends on the clinician's level of knowledge and experience. There are adverse effects and positive effects for both classes of medications to consider.

Menopause hormone treatment

For mild depression, without suicidality, in middle-aged women, when the doctor is confident there are some physical symptoms suggestive of perimenopausal changes, hormone therapy alone may be appropriate. It is important that menopause hormone treatment (MHT) is part of an overall strategy, including lifestyle recommendations regarding diet, exercise, smoking and alcohol for maintaining the health of midlife women.

Emerging directions in MHT include early start, clear patient selection, personalisation of dose and type plus lower MHT doses. There are a number of choices of MHT, which include oestrogens and progestogens in different types and doses. The current International Menopause Society guidelines, updated in 2016, are a comprehensive set of evidence-based practice guidelines and should be consulted when treating patients with MHT.[30]

Currently, the evidence base in terms of clinical trials conducted with MHTs in actual perimenopausal depression is limited. A large four-year study reported that conjugated equine oestrogen (CEE) (0.45mg/day with cyclic progesterone) but not transdermal oestradiol (0.05mg/day with cyclic progesterone) improved depressive symptoms compared with placebo.[31]

A large four-month trial found no effect with CEE (0.625mg/day with continuous medroxyprogesterone acetate).[32] One small

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study showed that depressed women treated with transdermal oestradiol (0.05mg/day) improved significantly after three weeks, compared with women receiving placebo.[33] Another study showed that depressive disorders were significantly more likely to remit with 12 weeks of transdermal estradiol (0.1mg/day) compared with placebo.[34] Overall, the data so far suggest that MHT is useful in treating perimenopausal depression but not in the postmenopausal phase.

MHT practice suggestions

The MHT types that are available for use in perimenopausal depression treatment include CEE or transdermal oestradiol 75-100mg/day or oral ethinyloestradiol.[30] Micronised progesterone can be administered as a cyclic regimen.

In early transition to menopause, the combined oestrogen–progestogen contraceptive pills are useful treatments, although it is important to keep in mind that many combined contraceptive pills may be associated with increases in depression.[30,35]

Tibolone is a synthetic steroid and has a mixed hormonal profile. Its oestrogenic potency is about one-fiftieth of that of ethinyl-oestradiol; its progestogenic potency is one-eighth that of norethisterone acetate; and the androgenic potency is about one-third that of norethisterone.[36]

It has been proven to relieve climacteric symptoms, improve libido and assist in the management of perimenopausal anxiety and mild depression.[37] One of the adverse effects with tibolone is intermenstrual bleeding, but an advantage of tibolone treatment is that it does not cause increased breast density.[30]

The risks and benefits of MHT differ for women during the menopause transition compared with older women. Bioidentical hormones are not recommended by the International Menopause Society because of standardisation and dosing issues.[30] Further recommendations from the IMS guidelines include: "Women taking MHT should have at least an annual consultation to include a physical examination, update of medical and family history, relevant laboratory and imaging investigations, a discussion on lifestyle and strategies to prevent or reduce chronic disease. There is currently no indication for increased mammographic or cervical smear screening."[30]

In perimenopausal women with mood-disorder symptoms that do not respond to first-line treatment with either MHT or antidepressants, it is advisable to combine both drug treatments.

Key messages in MHT use

- Oral oestrogen therapy is contraindicated in women with a personal history of VTE.
- Breast cancer risk should be evaluated before MHT prescription; however, the risk of breast cancer in women over 50 associated with MHT is a complex issue.
- The increased risk of breast cancer is primarily associated with the addition of a synthetic progestogen to oestrogen therapy (CEE + MPA continuous combined therapy) and related to the duration of use.

Source: Baber et al. *Climacteric* 2016; 2:109-50.

Antidepressant treatment

The usual first-line medication for perimenopausal depression is SSRIs. SNRIs are often second-line medications if SSRIs are not successful in treating depression. The antidepressant action of SSRIs usually takes 4-6 weeks to alleviate symptoms, and both SSRIs and SNRIs have been shown to have good impact on vasomotor symptoms.[38,39]

SSRIs are generally safe and effective but can have associated adverse events, such as serotonin syndrome, agitation, nausea, diarrhoea, anorexia, excessive sweating, decreased libido or anorgasmia, headache, insomnia and akathisia.

It is important to tailor the choice of SSRI for the woman. For example, fluoxetine can have an agitating side effect; therefore, a woman with prominent insomnia, irritability and anxiety may report an exacerbation of these symptoms with fluoxetine treatment.

Agomelatine is a newer antidepressant that has been shown to have a good antidepressant effect with minimal side effects in women with perimenopausal depression.[40]

A particular advantage is in the positive impact that agomelatine treatment has on insomnia, which troubles many perimenopausal women.

Combination MHT and antidepressant therapy

In perimenopausal women with mood-disorder symptoms that do not respond to first-line treatment with either MHT or antidepressants, it is advisable to combine both drug treatments. In such cases, both medication groups' adverse effects need to be monitored carefully.

Other treatments

Most patients with perimenopausal depression respond to treatment. However, the condition is a serious one, and suicide is sadly becoming a more common tragic outcome.[3] Psychiatric hospitalisation is indicated for women who are at risk of harming themselves and for those whose depressive symptoms have become persistent and overwhelming.

Case study

NADIA, aged 51, is seen in a specialist women's mental health clinic after a referral from her treating psychiatrist, following a suicide attempt.

She has been taking a combination of sertraline and quetiapine, with partial response, but still feels agitated, extremely guilty (now about her suicide attempt as well as previous issues), sad and has problems concentrating. She feels that her future is bleak and also cannot believe how different her life is now compared with just two years ago.

A detailed history reveals that two years earlier Nadia was a specialist nurse who worked in a senior role at a large hospital. She was in charge of a busy medical ward and worked in the same hospital for 22 years, achieving many promotions over this period of time. She held specialist nursing qualifications and supervised junior staff, as well as providing excellent care for her patients. She enjoyed her work and was a highly respected member of the hospital.

She had a warm, nurturing early family life, and she and her husband of 24 years enjoyed a stable, loving marriage with two caring sons, aged 17 and 14. Nadia was also caring for her frail, widowed mother.

Nadia had no previous history of mental illness, no serious physical illnesses and coped appropriately with the death of her father six years prior.

Over a period of two years, Nadia's life changed drastically. Insidiously, but steadily, she developed depression and anxiety symptoms that worsened over a six-month period. She began to have episodes of crying and sadness for no reason, became irritable and hostile at work and experienced difficulties with her memory and concentration.

One day, she was about to give a patient the wrong dose of medication and was stopped in time by a nursing colleague. Nadia felt devastated, ashamed and guilty about her error and then started to have panic attacks on her way to work. She lost her confidence and avoided giving medications to patients. She was asked to take leave and interpreted this as punishment for the recent incident. She stayed at home and became increasingly irritable, angry and resentful of her busy family.

At the same time, she noted that she gained 4kg despite her usual healthy diet, was sleeping very poorly and felt exhausted a lot of the time. Initially, her family tried to comfort her but, after some months, began to respond negatively.

Her elder son, a bright student who was doing his final year at high school, began to refuse to have dinner with his family, saying it was too difficult to be around his mother. Previously, Nadia had taken a great interest in both of her sons' schooling, often helping with homework.

Her younger son became isolated and said that he did not

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Online resources

International Menopause Society guidelines
bit.ly/2k6MAlh

References

Available on request from howtotreat@adg.com.au

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know why his mother "seemed to hate him now". Nadia's husband busied himself more and more in his work and often stayed away from home on business trips.

At this time, Nadia's elderly mother insisted that her daughter see her doctor. Nadia was diagnosed with depression and was started on a large dose of fluoxetine. She developed a number of adverse effects to the medication, such as agitation, increased anger and generally feeling "wired".

She tried two more different antidepressants — venlafaxine and then paroxetine — and an antipsychotic medication (quetiapine) was added to her treatment. She gained 18kg, which worsened her already low self-esteem. She continued to feel angry, agitated and tearful and had an increasing sense of pessimism about her future.

Her older son was suspended from school for using street drugs, and he decided to leave school and travel with his friend. She felt guilty about her son, and one night, she drove to a secluded spot and took an overdose of medications with alcohol, leaving a suicide note for her family in which she apologised profusely and stated that she felt they would be better off without her. By chance, a passer-by found her and called an ambulance.

At the women's mental health clinic, Nadia is diagnosed with perimenopausal depression because of the age of onset with no prior history, the associated weight gain, exhaustion, irritability and memory changes. She is started on tibolone (2.5mg oral daily), and after a few weeks, her mental state is greatly improved.

She continues to take the tibolone and has regular breast screening and other general health monitoring with her GP. Six months after the consultation with the specialist clinic, Nadia says she "feels like her old self".

Perimenopausal depression is a common condition that is often underestimated.

The residual impact from two years of severe depression has left many scars. Nadia consults with a psychologist to help her understand the awful experiences and reclaim her life.

Nadia's husband attends a session at the specialist clinic with her and benefits greatly from a discussion about perimenopausal depression and its treatment. Nadia speaks about her guilt, and her husband expresses his grief about his wife attempting suicide and how reassured he feels by her progress. Psychotherapeutic work with both sons is also undertaken with good results.

One year after her initial consultation at the specialist clinic (four years after the onset of perimenopausal depression), Nadia returns to nursing, her elder son completes year 12 and goes to university, while her younger son is doing very well in his final year of school.

Perimenopausal depression is a common condition that is often underestimated. It can be very severe in its impact on midlife women, their families and the broader community. We need more research and greater advocacy for the early recognition and special treatment of this condition.

How to Treat Quiz

GO ONLINE TO COMPLETE THE QUIZ

Perimenopausal depression — 14 April 2017

www.australiandoctor.com.au/education/how-to-treat

1. Which THREE statements regarding the background to perimenopausal depression are correct?
a) Depressive symptoms are common in women experiencing transition to menopause.
b) An estimated 5% of perimenopausal women will present to their primary healthcare physicians with depressive symptoms that may not be recognised specifically as 'perimenopausal depression'.
c) Research has found depressive symptoms to be increased during the menopausal transition and decreased after menopause.
d) The perimenopausal period, which marks a major transition in reproductive life, can be a challenging time for many women as a result of gonadal hormone fluctuations, as well as physical and mental issues related to ageing.

2. In addition to varying menstrual cycle lengths, which THREE are classical menopausal symptoms?
a) Hot flushes.
b) Sleep disturbance.
c) Vaginal dryness.
d) Skin itch and dryness.

3. Which TWO statements are correct?
a) Early perimenopause is a period of high gonadotropin FSH and LH levels and increased oestradiol secretion.
b) The perimenopause, which has a median age of onset of 47.5 years, has distinct endocrine characteristics.
c) During the menopause transition, one in four women experience severe vasomotor symptoms and one in three experience severe psychological symptoms.
d) Women with earlier-onset severe symptoms are more likely to have symptoms that persist for several years.

4. Which THREE features are more common in perimenopausal depression than in major depressive disorder?
a) Increased anger.
b) More severe sadness symptoms.
c) Reduced sleep quality.
d) Increased fatigue that is independent of sleep quality.

5. Which TWO statements regarding the clinical presentation in perimenopausal depression are correct?
a) The physical symptoms of the menopause often present much later than the psychological symptoms.
b) Sleep problems and weight loss are common symptoms.
c) Perimenopausal depression symptoms and major depressive disorder have overlapping symptoms, but there are some key differences in the quality and type of symptoms experienced by women in the perimenopause.
d) Anxiety, depression and change in cognitive function are unrelated to menopause.

6. Which THREE statements regarding the aetiology of perimenopausal depression are correct?
a) Observations and data suggest that depression is significantly linked to times of hormonal change in women.
b) Progestogen is the major modulator of serotonin and norepinephrine, which are thought to be the key neurotransmitters most related to the development of depression.
c) Absolute levels of gonadal hormones are not correlated with depression.
d) Women who experience surgical or early menopause appear to have increased risk of perimenopausal depression.

7. Which TWO psychological factors appear to predispose women to perimenopausal depression?
a) Being childless.
b) Chronic medical condition, in particular diabetes or hypertension.
c) Negative attitude towards menopause and ageing.
d) Poor self-perceived health.

8. Which THREE investigations are appropriate in a woman with suspected perimenopausal depression?
a) Fasting blood glucose and HbA1c.
b) A thyroid function test.
c) FSH and LH.
d) A mammogram plus breast ultrasound if over 50.

9. Which TWO statements regarding management in perimenopausal depression are correct?
a) The data suggest that menopause hormone treatment is useful in treating perimenopausal depression but not in the postmenopausal phase.
b) Treatment may include psychotherapy, regular exercise, mindfulness techniques, yoga and dietary advice.
c) Tibolone has been proven to improve symptoms of the climacteric, but it does not appear to have an effect on perimenopausal anxiety and mild depression.
d) History of VTE is a relative contraindication to oral oestrogen therapy.

10. Which THREE statements are correct?
a) SSRIs are the most commonly used antidepressants in the treatment of perimenopausal depression.
b) SSRIs are generally safe and effective but can have associated adverse events.
c) Menopause hormone treatment and antidepressants should not be used in combination.
d) Psychiatric hospitalisation is indicated for women who are at risk of harming themselves and for those whose depressive symptoms have become persistent and overwhelming.

NEW RULES

DUE to a new RACGP CPD points upload fee, *Australian Doctor* will now only upload your 2 CPD points to the RACGP upon your request, and after you complete the online quiz and evaluation questionnaire. If you don't require points, feel free to complete the quiz but do not complete the online evaluation.

Please only complete the evaluation if you require CPD points.

For ACRRM members, PDP points will be uploaded to ACRRM quarterly.

Australian Doctor apologises for any inconvenience, but as *How to Treat* is provided to you at no cost, is independent and receives no sponsorship, this change has been made to avoid incurring RACGP fees.

Australian Doctor Education

NEXT WEEK'S HOW TO TREAT

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