



case studies in menopause

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Case Studies in Menopause

OVERVIEW

Since the initial report of the Women's Health Initiative was released in 2002, treatment of menopause-related symptoms has undergone a paradigm shift. As a result, physicians in a primary care setting must be knowledgeable about all available options and be able to competently and confidently discuss symptom management with patients.

The following cases provide insight into common clinical scenarios related to discussion, diagnosis and treatment of menopause-related symptoms. By studying these cases and completing the accompanying questions, primary care healthcare providers will be better equipped to address these specific scenarios, thereby improving consistent application of guidelines and the management of menopause-related symptoms.

LEARNING OBJECTIVES

Those participating in this activity will receive information that should allow them to:

- Increase the appropriate and consistent application of evidence-based menopause symptom management guidelines and recommendations within the clinical setting.
- Increase the ability of clinicians to make informed choices based on published data and established guidelines about available options regarding menopause symptoms and its management.

INSTRUCTIONS FOR PARTICIPATION & CREDIT

There are no fees for participating in or receiving credit for this educational activity. This activity is designed to be completed within the time designated on the title page; physicians should claim only those credits that reflect the time actually spent in the activity. To successfully earn credit, participants must complete the activity during the valid credit period that is noted on the title page.

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The American Academy of Physician Assistants (AAPA) accepts AMA Category 1 CME credit for the PRA from organizations accredited by ACCME. The University of North Texas Health Science Center at Fort Worth is accredited by ACCME to provide continuing medical education for physicians, and will provide physician assistants who successfully complete the activity with a Statement of Participation indicating that the activity was designated for 2 *AMA PRA Category 1 Credits*TM.

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FACULTY DISCLOSURES

The University of North Texas Health Science Center wishes to extend a special thank you to Claudio N. Soares, MD for generously sharing his time and expertise in the development of these case studies.

Claudio N. Soares, MD reports the following financial relationship(s): Wyeth: Honorarium/Non-CME Speaker, Honorarium/Advisory Board Member. GlaxoSmithKline: Honorarium/Non-CME Speaker, Honorarium/Advisory Board Member, AstraZeneca: Honorarium/Non-CME Speaker, Research Support/Investigational Trial Sponsor. Honorarium/Consultant, Advisory Board Member.

case vignette

Anna

PRESENTATION

AB, a 50-year-old female, presents with chief complaints of “sweats and hot chills” (6-7 episodes/day), accompanied by increased emotional lability, and crying outbursts over the past 3 months. She reports irregular periods over the last year (skipped 2 months without menses once, having heavier or lighter menstrual flow). She denies having any suicidal thoughts but reports feelings of hopelessness and sometimes she wishes she would sleep and “would never wake up...”.

She is currently sexually active but has progressively lost her sexual drive, with some dryness and low libido. More recently, she feels anxious and guilty because “her family doesn’t deserve seeing her this way”.

MEDICAL HISTORY

Occasional headaches.

G3P3

Tobacco: non-smoker.

EtOH: 2 glasses of wine/week (weekends). Having thoughts of drinking more often to “take the edge off”, but she has managed to avoid it.

Illicit drug use: denies recent history; +marijuana in past

MEDICATION

She has been using an over-the-counter combination acetaminophen/sleep aid because it “helps with headaches and helps her sleep”.

PSYCHIATRIC HISTORY

History of being “moody” 2 days before menstruation, with no significant impact on her daily life. She reported one episode of severe postpartum blues after the birth of her second child.

SOCIAL HISTORY

Lives with husband and 1 daughter (15 y.o.). Recently stopped taking painting classes because lost interest in social activities.

FAMILY HISTORY

Mother is 70 years old, with history of “anxiety” and insomnia.

PHYSICAL EXAM

BP = 120/80, P = 70

Height = 5’ 9”

Weight = 140 lb.

LABORATORY

FSH = 28

Estrogen = 200

T3, T4 and TSH= normal

Q Which of the following is a likely diagnosis for this patient?

- A. Generalized Anxiety Disorder
- B. Social phobia
- C. Primary insomnia
- D. Major depressive disorder
- E. Menopause-related “hormonal dysfunction”

Q Which class of medication would you recommend?

- A. Benzodiazepines
- B. Antidepressants
- C. Non-benzodiazepine sleeping pills
- D. Mood stabilizers

CLINICAL COURSE

You recommend use of an SSRI for treatment of a major depressive episode in the context of a menopausal transition. After 8 weeks of treatment, AB reports feeling less sad, with some more motivation and being able to get to sleep, but reports frequent wake-ups during the night when she is completely soaked. She reports feeling constantly “tired” during the day even though she feels more motivated and interested. Her sexual drive has worsened as she struggles to achieve an orgasm during sexual intercourse.

Q What would you do next?

- A. Increase the SSRI dosage?
- B. Wait for a couple of weeks for possible late response?
- C. Add a sleeping pill?
- D. Add hormonal replacement therapy?

FOLLOW-UP

You recommended use of hormone therapy adjunctive to antidepressant and, after 2 weeks, AB refers substantial improvement in her sleeping pattern, her sexual drive and is gradually going back to her normal routine.

SUMMARY

Recent epidemiological studies have suggested that menopause transition may be a period at risk for newly onset and recurrent depression (1, 2). One of the largest community-based studies that investigated over 3000 pre- and perimenopausal women showed that those that were on menopause transition exhibited higher rates of depression than those that were premenopause (1). A longitudinal study that followed-up 460 premenopausal women with no previous history of depression showed that those that entered the perimenopause were nearly twice as likely (OR= 1.8; CI= 1.0-3.2) to develop a major depressive episode compared to those that remained premenopausal after controlling for potential confounders (2). Notably, this risk was higher in women with self-reported vasomotor symptoms (OR= 2.2; CI= 1.1-4.2), suggesting that the presence of vasomotor symptoms may increase the risk for new onset depression in this population. This is well illustrated in the present case report, where AB displays clinical symptoms compatible with a diagnosis of major depressive episode that emerged during the menopause transition and is associated with significant vasomotor symptoms (hot flashes and night sweats).

A number of treatment studies have shown that the use of antidepressants, such as SSRIs, SNRIs or mirtazapine is indicated in the management of a major depressive episode during menopausal transition (3-6). Although the efficacy in the alleviation of vasomotor symptoms with antidepressants is lower than with the use of hormonal therapy (HT), antidepressants have demonstrated superior efficacy over placebo (7, 8). In the present case report, the adjunctive use of antidepressants and HT was beneficial in order to achieve complete recovery from depressive and vasomotor symptoms and for the improvement of sexual dysfunction. This is consistent with recent trials in which these agents exerted mutual augmentative effects (9, 10).

REFERENCES

1. Bromberger JT, Assmann SF, Avis NE, Schocken M, Kravitz HM, Cordal A. Persistent mood symptoms in a multiethnic community cohort of pre- and perimenopausal women. *American journal of epidemiology* 2003 Aug 15; 158(4): 347-356.
2. Cohen LS, Soares CN, Vitonis AF, Otto MW, Harlow BL. Risk for new onset of depression during the menopausal transition: the Harvard study of moods and cycles. *Archives of general psychiatry* 2006 Apr; 63(4): 385-390.
3. Soares CN, Arsenio H, Joffe H, Bankier B, Cassano P, Petrillo LF et al. Escitalopram versus ethinyl estradiol and norethindrone acetate for symptomatic peri- and postmenopausal women: impact on depression, vasomotor symptoms, sleep, and quality of life. *Menopause (New York, NY)* 2006 Sep-Oct; 13(5): 780-786.
4. Soares CN, Poitras JR, Prouty J, Alexander AB, Shifren JL, Cohen LS. Efficacy of citalopram as a monotherapy or as an adjunctive treatment to estrogen therapy for perimenopausal and postmenopausal women with depression and vasomotor symptoms. *The Journal of clinical psychiatry* 2003 Apr; 64(4): 473-479.
5. Joffe H, Groninger H, Soares CN, Nonacs R, Cohen LS. An open trial of mirtazapine in menopausal women with depression unresponsive to estrogen replacement therapy. *Journal of women's health & gender-based medicine* 2001 Dec; 10(10): 999-1004.
6. Joffe H, Soares CN, Petrillo LF, Viguera AC, Somley BL, Koch JK et al. Treatment of depression and menopause-related symptoms with the serotonin-norepinephrine reuptake inhibitor duloxetine. *The Journal of clinical psychiatry* 2007 Jun; 68(6): 943-950.
7. Soares CN, Joffe H, Viguera AC, Petrillo L, Rydzewski M, Yehezkel R et al. Paroxetine versus placebo for women in midlife after hormone therapy discontinuation. *The American journal of medicine* 2008 Feb; 121(2): 159-162 e151.
8. Thase ME, Entsuah R, Cantillon M, Kornstein SG. Relative antidepressant efficacy of venlafaxine and SSRIs: sex-age interactions. *Journal of women's health (2002)* 2005 Sep; 14(7): 609-616.
9. Zanardi R, Rossini D, Magri L, Malaguti A, Colombo C, Smeraldi E. Response to SSRIs and role of the hormonal therapy in postmenopausal depression. *Eur Neuropsychopharmacol* 2007 May-Jun; 17(6-7): 400-405.
10. Morgan ML, Cook IA, Rapkin AJ, Leuchter AF. Estrogen augmentation of antidepressants in perimenopausal depression: a pilot study. *The Journal of clinical psychiatry* 2005 Jun; 66(6): 774-780.
11. Soares CN. Menopausal transition and depression: who is at risk and how to treat it? *Expert review of neurotherapeutics* 2007 Oct; 7(10): 1285-1293.

Table. Treatment strategies for the management of new-onset depression during menopause transition.

Clinical Scenario	Strategies
First-onset of depression occurring during the menopause transition, associated with significant vasomotor symptoms	<ul style="list-style-type: none"> • Antidepressants may be an option for the management of depressive and vasomotor symptoms. • If HT is not contraindicated, a trial with estrogen may be considered. • If HT is initiated, periodic reassessments of risks/benefits are necessary. • Progestins should be used in patients with intact uterus. • Some cases may benefit with combination of HT+antidepressants. • Cognitive-behavioral therapy may be helpful, although evidence is scarce in this population.

Adapted from Soares (11).

case vignette

Carmen

PRESENTATION

CD, a 48-year-old female, presents with a complaint of “severe insomnia, haven’t sleep well for years”. Detailed history revealed that CD has experienced difficulties in falling asleep for many years, particularly in the week prior to her menses, when she usually feels ‘wired before going to bed’, ‘worried and irritable about everything’, ‘can’t turn it off’. During this time, it usually takes half an hour or longer for CD to fall asleep. She has never sought treatment because “it was not severe enough to affect her job or concentration the next day”, and “it would go away when the periods come”.

For the past 3 months, CD noticed that not only it has been taking longer to get to sleep, but also she has not been able to maintain sleep, waking up on average 3 times per night. She also noticed that some nights she wakes up sweating, which makes her very uncomfortable. She reports being more tired and with difficulty concentrating at work. She denies feeling sad or anxious, although she doesn’t have much motivation to social activities.

MEDICAL HISTORY

Hypertension.

G2P2

Tobacco: smoking 10 cigarettes/day for 30 years.

EtOH: 2-4 glasses of wine/week.

Drinking 4 cups of coffee during the day because “it helps her stay more alert”.

Last menstrual period - 9 months ago

MEDICATION

-blocker once/day for hypertension.

PSYCHIATRIC HISTORY

No.

SOCIAL HISTORY

Lives with a supportive husband. No pets.

FAMILY HISTORY

Mother 70 y.o. with history of hypertension.

PHYSICAL EXAM

BP = 145/90, P = 88

Height = 5’ 6”

Weight = 150 lb.

LABORATORY

FSH = 36

Estrogen = 180

Q Which of the following is a likely diagnosis for this patient?

- A. Premenstrual Dysphoric Disorder
- B. Primary insomnia
- C. Menopause-related insomnia + Exacerbation of Premenstrual Syndrome
- D. Anxiety Disorder
- E. Obstructive sleep apnea syndrome

Q Which class of medication would you recommend?

- A. Benzodiazepines
- B. Antidepressants
- C. Non-benzodiazepine sleeping pills
- D. Hormone therapy

CLINICAL COURSE

You recommend use of oral contraceptive (OC) to regulate her cycles and alleviate her menopause-related symptoms, including night sweats and disrupted sleep. Patient developed increased dysphoria during the first month of treatment and opted for discontinuing OC. Next trial includes transdermal estrogen plus micronized progesterone, in association with sleep hygiene measures, light exercise and reduction of caffeine intake. After 2 weeks of treatment, CD calls for an earlier appointment due to severe headaches, which she attributes to the use of hormonal therapy. She is reluctant to remain on HT despite significant improvement of her vasomotor symptoms and her sleeping pattern.

Q What would you do next?

- A. Decrease the estrogen dosage
- B. Stop with hormone replacement
- C. Change to a sleeping pill
- D. Wait a few more days for headaches to disappear

FOLLOW-UP I

You discuss the options with the patient and she is willing to stay on HRT on a lower dose. After 3 weeks, CD reports that her headaches progressively disappeared; she is now having moderate hot flushes and night sweats, and still unable to remain asleep throughout the night.

Q What would you do next?

- A. Increase the estrogen dosage again
- B. Stop with hormone replacement
- C. Add a sleeping pill
- D. Wait a few more days

FOLLOW-UP II

You recommend the use of a non-benzodiazepine sleeping agent for a short-term treatment and CD achieve what she considers a “restorative” sleeping pattern.

SUMMARY

Several epidemiological studies have demonstrated that women have 30-80% higher risk for developing insomnia than men (1). Some have suggested that sex hormones may play a role in such increased risk. In fact, some studies observed that sleep disturbances may be particularly prominent during specific periods of female reproductive cycle, such as premenstrual periods (2) and during the menopause transition. Up to 60% of perimenopausal and postmenopausal women experience sleep disturbance, a slight increase from prevalence rates of premenopausal women. (3). This is illustrated in the present case vignette, in which patient CD has a history of worsening in her sleeping pattern during premenstrual period along with symptoms of anxiety and increased irritability. In addition, sleep disturbances become more intense as she approaches menopause.

Up to 75% of women experience the emergence of vasomotor symptoms during menopause transition (4), and the presence of nocturnal hot flashes has been associated with significant sleep disruption (5). In addition, lack of sleep is likely to account for some of the next-day cognitive complaints exhibited by CD. Overall, sleep hygiene measures are welcome but have limited efficacy when used alone (6). The positive effects of hormone

therapy (HT) on menopause-related insomnia has been subjectively reported in clinical trials, despite lack of significant changes in objective sleep parameters (7). Nevertheless, HT is a good option in the management of menopause-related insomnia, especially when associated with vasomotor symptoms.

In the present case report, the emergence of adverse effects with HT use led to a reduction in hormone dosage. As a result, CD remained symptomatic, with frequent awakenings due to night sweats. The use of non-benzodiazepines in the treatment of menopause-related insomnia has shown some positive results, particularly with eszopiclone and zolpidem (8, 9).

REFERENCES

1. Krystal AD. Insomnia in women. *Clinical cornerstone* 2003; 5(3): 41-50.
2. Schenck CH, Mahowald MW. Two cases of premenstrual sleep terrors and injurious sleep-walking. *Journal of psychosomatic obstetrics and gynaecology* 1995 Jun; 16(2): 79-84.
3. Dennerstein L, Dudley EC, Hopper JL, Guthrie JR, Burger HG. A prospective population-based study of menopausal symptoms. *Obstetrics and gynecology* 2000 Sep; 96(3): 351-358.
4. Freedman RR. Hot flashes: behavioral treatments, mechanisms, and relation to sleep. *The American journal of medicine* 2005 Dec 19; 118 Suppl 12B: 124-130.
5. Moline ML, Broch L, Zak R, Gross V. Sleep in women across the life cycle from adulthood through menopause. *Sleep medicine reviews* 2003 Apr; 7(2): 155-177.
6. Stepanski EJ, Wyatt JK. Use of sleep hygiene in the treatment of insomnia. *Sleep medicine reviews* 2003 Jun; 7(3): 215-225.
7. Soares CN, Murray BJ. Sleep disorders in women: clinical evidence and treatment strategies. *The Psychiatric clinics of North America* 2006 Dec; 29(4): 1095-1113; abstract xi.
8. Soares CN, Joffe H, Rubens R, Caron J, Roth T, Cohen L. Eszopiclone in patients with insomnia during perimenopause and early postmenopause: a randomized controlled trial. *Obstetrics and gynecology* 2006 Dec; 108(6): 1402-1410.
9. Dorsey CM, Lee KA, Scharf MB. Effect of zolpidem on sleep in women with perimenopausal and postmenopausal insomnia: a 4-week, randomized, multicenter, double-blind, placebo-controlled study. *Clinical therapeutics* 2004 Oct; 26(10): 1578-1586.

Table. Treatment strategies for the management of insomnia during menopause transition.

Clinical Scenario	Strategies
New-onset or worsening of insomnia during the menopause transition, associated with significant vasomotor symptoms	<ul style="list-style-type: none">• If HT is not contraindicated, a trial with estrogen may be considered.• If HT is initiated, periodic reassessments of risks/benefits are necessary.• Progestins should be used in patients with intact uterus. Use of micronized progesterone should be considered due to its sedating effects.• Non-benzodiazepines have shown positive efficacy in the management of menopause-related insomnia.• Although controlled evidence is lacking, the use of some herbal or dietary supplements may be useful.• Antidepressants should be considered if depressive symptoms are present.

Adapted from Soares and Murray (7).

Case Studies in Menopause CME Post-Test Instructions

Release Date: March 1, 2008

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Case Studies in Menopause CME Post-Test

Please record your answers on the Credit Request form on the reverse side of this page (bottom right corner).

1. The differential diagnosis for major depressive disorder in menopausal women includes:
 - A. Hypothyroidism
 - B. Migraine
 - C. Arthritis
 - D. Hot flashes

2. The positive effects of hormone replacement therapy (HRT) on menopause-related insomnia has been subjectively reported in clinical trials, despite lack of significant changes in objective sleep parameters.
 - A. True
 - B. False

3. Treatment strategies for the management of new-onset depression during menopause transition do not include:
 - A. Antidepressants
 - B. SERMs with ER beta selective activity
 - C. HRT if not contraindicated
 - D. Cognitive-behavioral therapy

4. Recent epidemiological studies have suggested that menopause transition may be a period at risk for both newly onset and recurrent depression.
 - A. True
 - B. False

5. Treatment strategies for the management of insomnia during menopause transition do not include:
 - A. Progestins in patients with intact uterus.
 - B. Non-benzodiazepines
 - C. Antidepressants regardless of depressive symptoms present
 - D. Adjuvant sleep hygiene measures

6. Estrogen, in either opposed or unopposed regimens, is the most consistently effective therapy for vasomotor symptoms.
 - A. True
 - B. False

7. What percentage of perimenopausal & postmenopausal women experience sleep disturbance compared to the prevalence rates of pre-menopausal women?
 - A. Less than 10%
 - B. 20-30%
 - C. 40-60%
 - D. Greater than 85%

8. The adjunctive use of antidepressants and HRT exerts mutual augmentative effects.
 - A. True
 - B. False

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Please rate to what extent this activity achieved its objectives:

Scale: P=Poor F=Fair G=Good VG=Very Good E=Excellent

OBJECTIVES	P	F	G	VG	E
1 Increase the appropriate and consistent application of evidence-based menopause symptom management guidelines and recommendations within the clinical setting.	(5)	(4)	(3)	(2)	(1)
2 Increase the ability of clinicians to make informed choices based on published data and established guidelines about available options regarding menopause symptoms and its management.	(5)	(4)	(3)	(2)	(1)
CONTENT	P	F	G	VG	E
3 Please rate to what extent this activity is fair and balanced	(5)	(4)	(3)	(2)	(1)
4 What is the likelihood that you will implement a change in your practice based on information presented at this activity?	(5)	(4)	(3)	(2)	(1)
5 What is your OVERALL rating of this activity?	(5)	(4)	(3)	(2)	(1)

Comments? Suggestions?

Post-Test Responses				
Q#	A/T	B/F	C	D
1	(1)	(2)	(3)	(4)
2	(1)	(2)		
3	(1)	(2)	(3)	(4)
4	(1)	(2)		
5	(1)	(2)	(3)	(4)
6	(1)	(2)		
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