

Psychiatric Aspect Of Menopause- A Review



Medical Science

KEYWORDS : Menopause, psychiatry, morbidity

**DR. SATYAKAM
MOHAPATRA**

MD MENTAL HEALTH INSTITUTE S.C.B. MEDICAL COLLEGE CUTTACK ODISHA,
753007 CORESPONDING AUTHOR

ABSTRACT

There has been much debate about the relation of psychiatric symptoms to the menopause. Clinical and neuropsychological studies in menopause showed that menopause is linked to certain psychological and behavioral changes.

Knowledge about mood and psychotic symptoms during perimenopause is quickly accumulating, more research is still needed on a wide spectrum of mental disorders.

Introduction

In the past, menopause research has primarily focused on the physiological and biological changes during a woman's life. However, clinical and neuropsychological studies in menopause have become more popular with fascinating results surfacing over the past few years. It is now widely accepted that menopause is linked to certain psychological and behavioral changes. It is estimated that 80 to 85% of all women experience unpleasant psychological symptoms at some point during their menopausal transition^[1]. Although menopause-related symptoms are transitory, symptomatic menopausal women often suffer detriments in various aspects of mental health and perceived quality of life^[2].

Epidemiology

Several studies have indicated no increase in the prevalence of psychiatric disorders after menopause^[3], but a higher prevalence of psychiatric morbidity among perimenopausal women, especially those seeking care in menopause clinics^[4]. Studies of smaller or more specific populations have suggested that certain individuals may be at greater risk of psychiatric morbidity during the perimenopausal years. There was a trend for increased risk for psychiatric morbidity in women who experience early menopause or surgical menopause^[5]. Studies have shown that women who have a history of mood disorder, who had severe premenstrual mood instability and have met criteria for premenstrual dysphoric disorder, and women who have experienced psychiatric morbidity associated with other reproductive life events such as postpartum depression are at high risk of developing psychiatric morbidity during perimenopausal period^[6,7].

Etiological factors

Neurotransmitters and hormones

Female reproductive hormones do exert effect on the brain neurotransmitter systems, particularly the serotonin and gamma amino butyric acid systems. Estrogen has been reported to modulate serotonin, to increase serotonin presynaptic reuptake, modulate norepinephrine levels, decrease monoamine oxidase levels, affect dopamine turnover, increase brain excitability, affect endorphin levels, and possibly interact with gamma amino butyric acid^[8]. Progesterone has been reported to increase monoamine oxidase levels. In high doses, progesterone has an anesthetic effect and may decrease brain excitability by an interaction with the gamma amino butyric acid system. This change in hormone levels during menopause cause women to experience subtle mood and cognitive changes.

Psychosocial factors

A number of major life stressors frequently confront women during the years leading up to menopause. These include caring for aging or infirm parents and/or teenage children still at home, watching children leave home, juggling work and family responsibilities, dealing with financial concerns regarding retirement, and coping with other health issues. For some women these years may be seen as the last chance for a pregnancy. Women who have suffered from infertility or experienced perinatal loss

may re-experience feelings of grief.

Mood and cognitive disturbances

Mood and cognitive disturbances common during perimenopause include mood swings, irritability, fatigue, a subjective sense of loss of memory, difficulty with word retrieval, decreased concentration, and decreased libido. These symptoms often occur in the absence of physical symptoms such as hot flushes or vaginal dryness. Women experiencing hot flushes may have restless sleep with night sweats, which will tend to worsen mood and cognitive symptoms^[9]. Women who have suffered from premenstrual dysphoric disorder often experience a worsening of their symptoms, with an increase in both the duration of the symptomatic time and an increase in symptom intensity.

In the United States, 1.3 million women reach menopause annually and out of which 20% have depression at some point during menopause^[10]. Community sample study of women undergoing natural menopause also demonstrated an increase in depressive symptoms during perimenopause^[11]. Harvard Study of Moods and Cycles found that women who entered perimenopause were twice as likely to have clinically significant depressive symptoms as women who had not yet made the menopausal transition^[12]. The Penn Ovarian Aging Study, a cohort study, found depressive symptoms to be increased during the menopausal transition and decreased after menopause^[13].

A personal or family history of major depression, postpartum depression, or premenstrual dysphoric disorder seem to be a major risk factor for depression in the perimenopausal period^[10].

Exacerbation of mood symptoms during menopause has been noted in women with preexisting bipolar disorder. The frequency of depressive episodes in this population appears to be higher than during premenopausal years^[14]. Earlier studies suggested an increase in rapid cycling during the menopausal transition; however, this finding has not been reproduced^[15].

Schizophrenia

Perimenopause appears to be a time of increased risk for onset of schizophrenia. Some researchers have observed a worsening of the course of schizophrenia in women during the menopausal transition. Estrogen serve both to protect against the onset of schizophrenia, and also to mitigate positive symptoms, so that women who develop schizophrenia peri- or post menopause are bereft of these hormonal effects^[16]. Several studies have shown that estrogen has the capacity to delay onset of schizophrenia, diminish the severity of psychotic symptoms, and/or facilitate lower effective doses of neuroleptic drugs. So this holds exciting possibilities for the treatment and prevention of schizophrenia in women^[17].

Panic disorder

Panic disorder is common during perimenopause. New-onset panic disorder may occur during menopause, or preexisting panic disorder may worsen. Panic disorder may be most common in

women with many physical symptoms of menopause^[18] . These attacks were associated with negative life events, functional impairment, and medical comorbidity^[19] .

Obsessive-compulsive disorder

New-onset obsessive-compulsive disorder (OCD), a relapse of OCD, or a change in OCD symptoms may occur during menopause. Fluctuations in OCD have been correlated with the menstrual cycle and with pregnancy, suggesting that hormone levels may contribute to the disorder^[20] .

Problems with sleep

Insomnia occurs in 40-50% of women during the menopausal transition, and problems with sleep may or may not be connected to mood disorders^[21] . Women with insomnia are more likely than others to report problems such as anxiety, stress, tension, and depressive symptoms. Sleep disturbances during menopause have been associated with estrogen deficiency. Elevated LH levels during late menopause produce poor sleep quality through a thermoregulatory mechanism, resulting in high core body temperatures^[22] . However, in the Medical Research Council National Survey of Health, women who were transitioning into menopause were more likely to report severe sleep difficulty than women who were premenopausal^[23] . Besides undergoing changes in estrogen and progesterone levels, postmenopausal women experience declines in levels of melatonin and growth hormone, both of which have effects on sleep^[24] .

Treatment of menopausal psychiatric morbidities

For menopausal women experiencing mild depression as well as anxiety, insomnia and vasomotor symptoms, ovarian hormone therapy is a first-line treatment unless there are contraindications to estrogen use^[25] . In women with moderate to severe depression or anxiety, antidepressant medication is the treatment of choice and the use of estrogen in such cases remains controversial^[26] .

Antidepressant therapy

For major depression, standard antidepressants are first-line treatments. Selective serotonin reuptake inhibitors (SSRIs) are

the antidepressants most commonly used in the treatment of perimenopausal depression. SSRIs are thought to be generally safe and effective. Several of these medications inhibit the cytochrome P450 (CYP450) enzymes; therefore, it is prudent to check for drug interactions.

Hormone replacement therapy

For mild depression, hormone replacement therapy alone may be appropriate. Estrogen may also be used when traditional antidepressants failed, when patients refuse psychotropic medications, or when patients experience other clinically significant vasomotor symptoms^[27] . Women who have surgically induced menopause have an increased risk of depression,^[28] and they may be especially likely to benefit from hormone replacement therapy. Data from several studies suggested that estrogen replacement therapy had antidepressant effects or that it enhanced the effects of antidepressant treatment in perimenopausal women^[29] . Other studies did not show that estrogen adds to the effects of SSRIs^[30] . In general, such treatments appear to be helpful for managing depressive symptoms in perimenopause but not in postmenopause^[31] .

Treatment of hot flashes

SSRIs are sometimes used to treat hot flashes. Paroxetine, controlled-release paroxetine, extended-release venlafaxine, and escitalopram may provide some benefit^[32, 33] . Clonidine and gabapentin have been shown to reduce hot flashes.

Conclusion

Although the body of knowledge about mood and psychotic symptoms during perimenopause is quickly accumulating, more research is still needed on a wide spectrum of mental disorders—including anxiety disorder, obsessive-compulsive disorder, panic disorder, and posttraumatic stress disorder—during the menopausal transition. This research should focus on evaluating prevalence, identifying risk factors, and examining how hormonal fluctuations, physiological symptoms, and stressful life events each contribute to affective instability, as well as investigating the specific potential for estrogen therapy—alone or in combination with other medications—to moderate symptom severity.

REFERENCE

1. North American Menopause Society: Treatment of menopause-associated vasomotor symptoms: Position statement. *Menopause* . 2004, 2:11–33. | 2. Blumel JE, Castelo-Branco C, Binfa L, et al.: Quality of life after the menopause: A population study. *Maturitas*. 2000;34:17–23 | 3. Schmidt PJ, Rubinow DR. Menopause-related affective disorder: a justification for further study. *Am J Psychiatry* 1991;148:844–52. | 4. Novaes C, Almeida OP. Premenstrual syndrome and psychiatric morbidity at the menopause. *J Psychosom Obstet Gynecol* 1999;20:56–57 | 5. McKinlay JB, McKinlay SM, Brambilla D, et al. The relative contributions of endocrine changes and social circumstances to depression in mid-aged women. *J Health Soc Behav* 1987; 28:345–363. | 6. Hay AG, Bancroft J, Johnstone EC, et al. Affective symptoms in women attending a menopause clinic. *Br J Psychiatry* 1994;164:513–516. | 7. Stewart DE, Boydell K. Psychologic distress during menopause: Associations across the reproductive life cycle. *Int J Psychiatry Med* 1993;23:157–162. | 8. Pearlstein TB. Hormones and depression: What are the facts about premenstrual syndrome, menopause, and hormone replacement therapy? *Am J Obstet Gynecol* 1995;173:646–653. | 9. Alder, B. The perimenopause. In: Steiner M, Yonkers KA, and Eriksson E (eds). *Mood Disorders in Women*. London: Martin Dunitz Ltd, 2000:383–397 | 10. Soares CN. Perimenopause-related mood disturbance: an update on risk factors and novel treatment strategies available. In: Meeting Program and Abstracts. *Psychopharmacology and Reproductive Transitions Symposium*. American Psychiatric Association 157th Annual Meeting; May 1–6, 2004; New York, NY. Arlington, Va: American Psychiatric Publishing; 2004:51–61. | 11. Maertens LW, Knottnerus JA, Pop VJ. Menopausal transition and increased depressive symptomatology: a community based prospective study. *Maturitas*. Jul 25 2002;42(3):195–200. | 12. 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. *Arch Gen Psychiatry*. Apr 2006;63(4):385–90 | 13. Freeman EW, Sammel MD, Liu L, Gracia CR, Nelson DB, Hollander L. Hormones and Menopausal Status as Predictors of Depression in Women in Transition to Menopause. *Arch Gen Psychiatry*. Jan 2004;61, no. 1:62–70. | 14. Marsh WK, Templeton A, Ketter TA, Rasgon NL. Increased frequency of depressive episodes during the menopausal transition in women with bipolar disorder: Preliminary Report. *Journal of Psychiatric Research*. 2008;42:247–51 | 15. Burt VK, Rasgon N. Special considerations in treating bipolar disorder in women. *Bipolar Disord*. Feb 2004;6(1):2–13. | 16. Genazzani AR, Gambacciani M, Simoncini T, Schneider HP. Hormone replacement therapy in climacteric and aging brain. *International Menopause Society Expert Workshop*, 15–18 March 2003, Pisa, Italy. *Climacteric*. Sep 2003;6(3):188–203 | 17. Riecher-Rössler A, Hafner H, Dutsch-Strobel A, et al. Further evidence for a specific role of estradiol in schizophrenia? *Biol Psychiatry*. 1994;36(7):492–494 | 18. Claudia P, Andrea C, Chiara C, Stefano L, Giuseppe M, Vincenzo DL. Panic disorder in menopause: a case control study. *Maturitas*. Jun 15 2004;48(2):147–54. | 19. Smoller JW, Pollack MH, Wassertheil-Smoller S, Barton B, Hendrix SL, Jackson RD, et al. Prevalence and Correlates of Panic Attacks in Postmenopausal Women. *Arch Intern Med*. Sept 2003;163:2041–47. | 20. Lochner C, Hemmings SM, Kinnear CJ, Moolman-Smook JC, Corfield VA, Knowles JA. Corrigendum to "gender in obsessive-compulsive disorder: clinical and genetic findings" *Eur Neuropsychopharmacol* 14 (2004) 105–13 | 21. Soares CN, Joffe H, Steiner M. Menopause and mood. *Clin Obstet Gynecol*. Sep 2004;47(3):576–91. | 22. Murphy PJ, Cambell SS. Sex hormones, sleep, and core body temperature in older postmenopausal women. *Sleep*. Dec 2007;30 (12):1788–94. | 23. Tom SE, Kuh D, Guralnik JM, Mishra GD. Self-reported sleep difficulty during the menopausal transition: results from a prospective cohort study. *Menopause*. Nov-Dec 2010;17(6):1128–35 | 24. Shin K, Shapiro C. Menopause, sex hormones, and sleep. *Bipolar Disord*. Apr 2003;5(2):106–9 | 25. Ditkoff EC, Cray WG, Cristo M et al. Estrogen improves psychological function in asymptomatic postmenopausal women. *Obstet Gynecol* 1991;78:991–5. | 26. Soares CN, Almeida OP, Joffe H, Cohen LS. Efficacy of estradiol for the treatment of depressive disorders in perimenopausal women: a double-blind, randomized, placebo-controlled trial. *Arch Gen Psychiatry* 2001;58:529–34. | 27. Genazzani AR, Gambacciani M, Simoncini T, Schneider HP. Hormone replacement therapy in climacteric and aging brain. *International Menopause Society Expert Workshop*, 15–18 March 2003, Pisa, Italy. *Climacteric*. Sep 2003;6(3):188–203. | 28. Dennerstein L, Guthrie JR, Clark M, Leher P, Henderson VW. A population-based study of depressed mood in middle-aged, Australian-born women. *Menopause*. Sep-Oct 2004;11(5):563–8 | 29. Klaiber EL, Broverman DM, Vogel W, Kobayashi Y. Estrogen therapy for severe persistent depressions in women. *Arch Gen Psychiatry*. May 1979;36(5):550–4. | 30. Schneider HP. Cross-national study of women's use of hormone replacement therapy (HRT) in Europe. *Int J Fertil Womens Med*. 1997;42 Suppl 2:365–75 | 31. Cohen LS, Soares CN, Poitras JR, Prouty J, Alexander AB, Shifren JL. Short-term use of estradiol for depression in perimenopausal and postmenopausal women: a preliminary report. *Am J Psychiatry*. Aug 2003;160(8):1519–22 | 32. Stearns V, Beebe KL, Iyengar M, Dube E. Paroxetine controlled release in the treatment of menopausal hot flashes: a randomized controlled trial. *JAMA*. Jun 4 2003;289(21):2827–34. | 33. Freeman EW, Guthrie KA, Cnaan B, et al. Efficacy of escitalopram for hot flashes in healthy menopausal women: a randomized controlled trial. *JAMA*. Jan 19 2011;305(3):267–743 |