

Nonpharmacological treatments during pregnancy and the postpartum period

Bright light therapy and various forms of psychotherapy have proven useful in treating pregnant and postpartum women with psychiatric disorders.

ABSTRACT: The choice of treatment for psychiatric disorders in pregnancy and the postpartum period will vary depending upon the type of disorder and the severity of the symptoms. Nonpharmacological treatments—including bright light therapy, cognitive behavioral therapy, interpersonal therapy, group therapy, and supportive therapy—have an important role to play as both first-line therapies for mild-to-moderate symptoms of anxiety disorders and depression, and as adjunctive therapies for severe symptoms.

When managing pregnant and postpartum women with mild or moderate symptoms of psychiatric disorders, clinicians should consider using nonpharmacological treatments first. When managing women with severe symptoms, clinicians should consider some of these same nonpharmacological treatments in addition to the psychotropic medications (see articles elsewhere in this issue) that are usually needed.

Bright light therapy

The use of bright light therapy as a treatment for psychiatric illnesses has been increasing steadily in the past few years. Bright light therapy is being used to treat a number of disorders where dysfunction of serotonin and/or melatonin regulation mechanisms is thought to be operative, such as in seasonal affective disorder (SAD), nonseasonal depression, circadian rhythm disturbances, and premenstrual disorder. The response rate to bright light treatment in these disorders can be as high as 80%.¹ These disorders all have similar symptoms: fatigue, low mood, increased appetite, social withdrawal, decreased interest in usual activities, and sleepiness.

Several recent reports^{2,3} suggest that pregnant and postpartum women with mood and anxiety disorders may benefit from bright light therapy as their symptoms are similar to those that are effectively treated by bright light.

Bright light therapy is administered by having the patient sit in front of a specially designed 10 000-lux light box for 30 minutes, preferably as soon as possible after awakening. This intensity of light is equivalent to the intensity of sunlight on a sunny spring morning. The bright light impulse is transmitted from the eye, via the retino-hypothalamic tract and a number of other predetermined pathways, to the pineal gland, which in turn synthesizes melatonin, the hormone that regulates the body's circadian rhythms. Although various theories exist regarding how bright light therapy might work, the exact mechanism remains

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unknown. Two prominent theories are favored to explain the mechanism of action of bright light therapy: the phase-shift hypothesis and the serotonin hypothesis. The phase-shift hypothesis is based on the observation that patients with SAD sleep longer in the morning, and are therefore phase-delayed. Treatment with morning light therapy is believed to restore the normal rhythms of patients with SAD

light therapy for the treatment of postpartum depression has been reported infrequently in the literature. One case study reported significant improvements in the depression ratings of two women treated with morning light therapy for 4 weeks.³ In a follow-up study (M. Corral, unpublished data, 2004), 18 women were randomly assigned to one of two groups, those receiving morning bright light treat-

feelings, behavior, physical reactions, and the environment. Treatment is generally administered over 12 to 15 sessions, either individually or in a group format, and is quite structured, thereby requiring motivated individuals.

CBT has been found to be highly effective in the treatment of depression, anxiety and panic, obsessive-compulsive disorder, and eating disorders.⁷⁻⁹ Preliminary studies of CBT for women with postpartum depression have indicated that CBT is effective in improving functioning compared with antidepressant and placebo medications.¹⁰ In the BCRMH program, this therapy has been specifically adapted for use in women with postpartum depression and anxiety. Cognitive approaches can be particularly helpful in providing useful strategies for depressed postpartum women to deal effectively with feelings of helplessness and loss of control.

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by causing phase-advancement. The serotonin hypothesis is based on growing evidence that serotonin is the main neurotransmitter involved in SAD, and that dysfunction in the serotonin system is associated with SAD.⁴⁻⁶

A high clinical response rate (80% or better) has been demonstrated in depressed pregnant and postpartum women treated with bright light therapy in the BC Reproductive Mental Health (BCRMH) program. Improvement with this treatment for mood disorders in the reproductive phase is supported by recent studies. One study involved the use of morning light therapy for 16 women with antepartum depression for 3 to 5 weeks.² After 3 weeks of treatment, mean depression ratings improved by 49% and there was no evidence of adverse effects of light therapy on pregnancy. The use of

ment for 5 weeks, and those receiving morning red light treatment (placebo) for 5 weeks. The study found that all 18 patients improved with treatment over time. Although the sample size used in this pilot study was too small to make any significant conclusions, the bright light group did show a more clearly pronounced improvement trend. The results of this pilot study indicate that light therapy deserves further study to more clearly ascertain whether it can be an effective alternative to antidepressant medications for the treatment of postpartum depression.

Cognitive behavioral therapy

Cognitive behavioral therapy (CBT) is a model of treatment that focuses on the interrelationship between thoughts,

Interpersonal therapy

Interpersonal therapy (IPT) is a short-term therapy that has been used successfully to treat mild-to-moderate depression. The treatment identifies problem areas for treatment, such as grief, role transition, interpersonal role disputes, and interpersonal deficits. The therapy is especially well suited for use in pregnant and postpartum women where change in role is a significant issue. One study involving 13 pregnant women with major depression reported a significant decrease in symptoms of depression, and concluded that IPT is an effective alternative to medication for women with moderate depression during pregnancy.¹¹ A recent study assessing the efficacy of IPT in the treatment of postpartum depression involved 120 women with postpartum depression randomly assigned to either an active treatment group, involving 12 weeks of IPT, or to a wait-list control

group.¹² A significant decrease in depression scores in the women receiving IPT led the authors to conclude that IPT is an effective alternative to pharmacotherapy for the treatment of moderate postpartum depression.

Group therapy

Group therapy has been found to be highly effective in the treatment of depression during the postpartum period.^{13,14} Groups usually last between 8 and 10 weeks, and are facilitated by a psychiatrist, psychologist, and/or a nurse-clinician. Group therapy usually involves a combination of supportive, psychodynamic, and cognitive behavioral therapy techniques, and may consist of some or all of the following components: social and emotional support from other women who were undergoing similar experiences, education about postpartum depression, exploration of community resources, and improvement of communication, self-assertion, and problem-solving skills. In addition, partner involvement is encouraged, and homework tasks are assigned in order to reinforce techniques learned in the group sessions. The benefits of group therapy for pregnant and postpartum women include cost-effectiveness, social interaction opportunities, and involvement of partners in the treatment plan.

Supportive therapy

Supportive therapy involves offering support, reassurance, and psychoeducation to women and their families. This type of therapy is used to augment other psychosocial interventions and/or pharmacotherapy, and it may be the only form of therapy a woman receives if she is not functioning at a high enough level to take part in cognitive behavioral therapy, interpersonal therapy, or group therapy sessions. The focus of supportive therapy is on

mobilizing family members and other social supports. Frequent visits with the therapist may be required until remission is achieved.

Summary

The ideal model of treatment for depressed pregnant or postpartum women involves a biopsychosocial approach. If a woman is suffering from mild or moderate symptoms, nonpharmacological therapies can be useful in controlling and relieving her symptoms. If a woman is suffering from more severe symptoms, pharmacological therapies will need to be considered, with the possible addition of some of the nonpharmacological therapies outlined here.

Competing interests

None declared.

References

1. Partonen T. Light therapy. In: Partonen T, Magnusson A (eds). *Seasonal Affective Disorder*. Toronto: Oxford University Press; 2001:66-78.
2. Oren DA, Wisner KL, Spinelli M, et al. An open trial of morning light therapy for treatment of antepartum depression. *Am J Psychiatry* 2002;159:666-669.
3. Corral M, Kuan A, Kostaras D. Bright light therapy's effect on postpartum depression. *Am J Psychiatry* 2000;157:303-304.
4. Lam RW, Zis AP, Grewal A, et al. Effects of rapid tryptophan depletion in patients with seasonal affective disorder in remission after light therapy. *Arch Gen Psychiatry* 1996;53:41-44.
5. McGrath RE, Buckwald B, Resnick EV. The effect of L-tryptophan on seasonal affective disorder. *J Clin Psychiatry* 1990; 51:162-163.
6. Smedh K, Spigset O, Allard P, et al. Platelet [3H] paroxetine binding and [3H] lysergic acid diethylamide binding in seasonal affective disorder and the effect of light therapy. *Biol Psychiatry* 1999;45: 464-470.

7. Beck AT, Rush AJ, Shaw BF, et al. *Cognitive Therapy of Depression*. New York: Guilford Press; 1979.
8. Clark D. Anxiety states: Panic and generalized anxiety. In: Hawton K, Salkovskis PM, Kirk J, et al. (eds). *Cognitive Therapy for Psychiatric Problems*. New York: Oxford University Press; 1989:52-96.
9. Fairburn CG, Marcus MD, Wilson GT. Cognitive behavioral therapy for binge eating and bulimia nervosa: A comprehensive treatment manual. In: Fairburn CG, Wilson GT (eds). *Binge Eating: Nature, Assessment and Treatment*. New York: Guilford Press; 1993:361-404.
10. Appleby L, Warner R, Whitton A, et al. A controlled study of fluoxetine and cognitive-behavioural counselling in the treatment of postnatal depression. *BMJ* 1997;314:932-936.
11. Spinelli MG. Interpersonal psychotherapy for depressed antepartum women: A pilot study. *Am J Psychiatry* 1997;154: 1028-1030.
12. O'Hara MW, Stuart S, Gorman LL, et al. Efficacy of interpersonal psychotherapy for postpartum depression. *Arch Gen Psychiatry* 2000;57:1039-1045.
13. Morgan M, Matthey S, Barnett B, et al. A group programme for postnatally distressed women and their partners. *J Adv Nurs* 1997;26:913-990.
14. Meager I, Milgrom J. Group treatment for postpartum depression: A pilot study. *Aust N Z J Psychiatry* 1996;30:852-860.

