

Commentary by PHILIP BOYCE MB BS, MD, FRANZCP

What is summer seasonal affective disorder and how should it be managed?

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# **CASE SCENARIO**

Meredith, aged 50 years, complains of what she claims is 'seasonal affective disorder' (SAD). She describes a classic depression that starts suddenly, not in winter, but in November each year and then abruptly ceases in March. On questioning, she admits that the Christmas period is never a happy time for her due to longstanding family conflict. She has never been referred to a psychiatrist or psychologist and never been treated with any form of antidepressant. She has read about melatonin and wonders if it might help.

Can SAD occur in summer? What would be the appropriate management for this patient, and is melatonin likely to be of any use?

## **COMMENTARY**

A pattern of depressive episodes recurring each year, in a specific season, has been observed since antiquity; however, it was not until the 1980s that the symptom pattern and a specific treatment were described for recurring episodes of winter depression, labelled as 'seasonal affective disorder'. The initial descriptions of SAD focused on recurring episodes of depression, arising in autumn/ winter and spontaneously remitting in spring/summer. The condition was linked to the short day length (photoperiod) of wintertime, with a disturbance to circadian rhythms that could be corrected by suppressing melatonin secretion by using bright artificial light.1

## What is summer SAD?

Although initial interest in seasonal mood disorders focused on recurring episodes of winter depression, a less common summer variant has also been identified.<sup>2,3</sup> This form of SAD presents with the 'classic' (or melancholic) symptoms of depression, rather than the atypical symptoms (characterised by hypersomnia, increased

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appetite, rejection sensitivity and 'heaviness' in the limbs) found in winter SAD.

The exact mechanism for this form of depression is not known, but it is most likely the result of a change to the normal regulation of circadian rhythms, with a 'phase advance' of rhythms arising as a result of the longer photoperiod. A phase advance means that the normal circadian rhythms are shifted to earlier in the day. For example, the usual nadir of the temperature and cortisol rhythms are at around 3 am; with a phase advance the nadir would be 'advanced' to around 1 am (a possible reason for the early morning awakening with depression).

Recurring episodes of depression at the same time each year do not necessarily imply SAD; the depression could arise as the result of stressful life events that regularly occur at the same time each year, such as times of particular work or family stresses, or the anniversary of a tragic event. Meredith describes Christmas as 'never being a happy time' as a consequence of family conflict. Although this could be a reason for her depression developing in the summertime, it is unlikely to be the cause because the onset of her depression, in November, is a considerable time prior to the stressful Christmas period. In addition, her depression remits around the onset of autumn, suggesting a seasonal pattern.

In Meredith's case, an important consideration is the impact of her depression and ability to cope with family conflict. It is possible that while depressed she becomes more sensitive to the family conflict and that this exacerbates her depression and makes it more difficult to deal with the conflict. It is also possible that her being depressed (and possibly withdrawn) leads to family conflict.

# **Managing summer SAD**

The management approach to summer SAD should follow the usual guidelines for the management of depression.<sup>4</sup> Bright light therapy, although effective for winter SAD,5 has not been used to treat the summer form because the depression is not the result of delayed melatonin secretion.

If the depression is mild to moderate, focused psychological treatments, especially CBT, may be sufficient to treat Meredith's depression.<sup>6</sup> This would also be of considerable benefit for her in developing skills to be able to deal with the family conflict.

Antidepressant medication is indicated for moderate to severe depression, with the selective serotonin reuptake inhibitors (SSRIs) and serotonin noradrenaline reuptake inhibitors (SNRIs) having demonstrated efficacy for SAD.7 If Meredith was able to identify the early warning signs, she could start taking the antidepressant with the first emergence of symptoms in November and then discontinue treatment in late March when her depression would normally remit. Psychological treatments, especially psychoeducation and CBT, should also be offered along with the medication.

The new antidepressant agomelatine, which has a direct effect

on synchronising circadian rhythms by its action on the melatonergic receptors in the suprachiasmatic nucleus, has been shown to have benefit in SAD.8

The role of melatonin in treating SAD is unclear, particularly for summer SAD. One study has shown that melatonin has a moderate effect in subsyndromal SAD,9 but it has not been evaluated thoroughly in the treatment of the summer variant of SAD. Melatonin (2 mg nocte) would only be indicated if there were significant associated sleep disturbance during the summer that may be exacerbating Meredith's depressive symptoms.

#### CONCLUSION

A summer variant of SAD has been identified that presents with the melancholic symptoms of depression rather than the atypical symptoms in winter SAD. This form of depression is not thought to be due to the result of delayed melatonin secretion. Its management approach is the same as that for depression in general. Meredith's family stress at Christmas time may be a consequence of her depression and her having difficulties coping with interpersonal problems.

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