

A Case of Seasonal Affective Disorder

by

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Case Presentation

Melanie Johnson is a 32-year-old accountant who moved to Green Bay, Wisconsin, two years ago from her hometown of Sarasota, Florida. Beginning this past November, for the first time in her life, Melanie began experiencing periods of depression, lethargy, and excessive sleeping. In addition, she noticed that she was eating more than she had previously, and as a result, had gained 10 pounds.

Melanie made an appointment with her physician, who after ruling out all potential medical causes of the symptoms she displayed, and after she was examined by a psychiatrist to rule out other causes of her depression, diagnosed her as having seasonal affective disorder (SAD).



Questions

1. Describe the exact anatomic location and histologic structure of the pineal gland, and describe the effect of light on the production of melatonin.
2. Describe the pathway connecting the photoreceptors of the eyes to the pineal gland.
3. How is the pineal gland functionally related to the adrenal medulla?
4. Define the term circadian rhythm, and cite examples of physiological events that occur as a result of such patterns.
5. Describe the condition known as seasonal affective disorder, and discuss the treatment of this condition.
6. Describe the use of melatonin in the treatment of “jet lag” and insomnia associated with aging.
7. Are any serious side effects known to occur as the result of the administration of melatonin?
8. List some environmental stresses that can affect pineal function.
9. Does the structure of the pineal gland change as we age?
10. How did the pineal gland get its name?

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