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### Seasonal affective disorder

Seasonal affective disorder (SAD) is a type of depression which occurs when you develop symptoms of depression only during the darker winter months each year. These symptoms then get better in spring. Winter blues or sub-syndromal SAD (S-SAD) is a less severe form of the condition.

## Symptoms of seasonal affective disorder (SAD)

People with SAD start to develop symptoms of depression in September. These symptoms become worse as the hours of daylight become shorter and are at their most severe between November and January. Symptoms tend to improve and go fairly quickly in the spring, over a week or so.

Some people who work in buildings without windows may have SAD symptoms throughout the year.

### Winter blues/sub-syndromal seasonal affective disorder (S-SAD)

In the winter many people feel more tired, sleep more, put on some weight, and feel a little low. However, they do not develop the full features of SAD and so are instead classed as having S-SAD.

#### Symptoms of depression

When symptoms develop in the winter, they are similar to those that occur in the non-seasonal ordinary type of depression. You may not have them all; however, several usually develop:

- Persistent low mood.
- Marked loss of interest or pleasure in activities that you would normally enjoy.
- Decreased energy/lethargy.

- Increased sleep and difficulty waking in the morning due to circadian rhythm disruption. The circadian rhythm controls our sleep cycles.
- Increased appetite and weight gain.
- Withdrawal from friends or family.
- Irritability.

In rare cases people with SAD have a reduced appetite and weight loss. In a very small number of cases, as spring arrives the mood changes from depression into an abnormally high and elated mood (mania or hypomania).

## How common is seasonal affective disorder (SAD)?

Between 2 and 5 people in 100 in the UK are thought to experience SAD. SAD is less common in countries near to the equator where the hours of sunlight are more constant and bright throughout the year.

SAD usually first begins between the ages of 20 to 30 but it can develop at any age. It affects four times as many women as men and often runs in families.

## What causes seasonal affective disorder (SAD)?

The exact cause is not clear. "Feel-good" hormones like serotonin, and hormones which influence sleep, like melatonin, are affected by the amount of sunlight we are exposed to.

With less sunlight during the winter months, changes in the balance of these chemicals and hormones may trigger SAD.

SAD also has a genetic link and so can run in families. It affects women more commonly than men but we do not yet understand why.

## **SAD vs Depression**

To be diagnosed with SAD a person must have experienced symptoms of depression during the winter months for at least two years running and these symptoms must go away in spring.

## **Investigations for SAD**

Your doctor may decide to do some blood tests to see if there are any other causes for your symptoms.

They may use a questionnaire called the Seasonal Pattern Assessment Questionnaire (SPAQ), to help decide whether you may have SAD. Recording your symptoms on a calendar to look for any patterns through the year can be very useful.

"Throughout the winter, we are less exposed to the sun because the days are shorter. When it's dark at night, your eyes send a signal to the brain that it's time to feel tired. If by 5pm the sun begins to set, it's bound to interfere with the body's alert levels."

Source: Dr Francisco Cruz

#### Seasonal affective disorder treatment

#### Self-help

These self-help measures will usually be enough to help mild S-SAD but see your doctor to discuss more treatment options for more severe symptoms.

- **Natural sunlight**. Aim to get as much natural daylight as possible, especially at midday and on bright days. For example, if possible, go for a walk outside every day for 1-2 hours during the daytime, as this may well improve symptoms, even if it's raining.
- Regular exercise. It is best to do this outside since this gives you daylight as well.
- **Tell your family and friends**. This is so that they can understand what is happening and be more supportive.
- Make plans for springtime. This is the time of year when the days will become longer.

 Winter holiday. For people who can afford it, a winter holiday to a sunny country will usually improve symptoms - but only for the duration of the time spent in the sunny country.

#### **Light therapy**

Many people find that bright light therapy helps to improve their symptoms of SAD. During research studies, it is difficult to measure the real effect of improving symptoms with light versus the placebo effect.

It is generally agreed by doctors that there is a good chance that light therapy can improve symptoms if you have SAD.

#### Usual treatments for depression

It is important that the depression symptoms of SAD should be treated in the same way as any kind of depression. These include antidepressant medicines and various forms of talking (psychological) therapies such as cognitive behavioural therapy (CBT). See separate leaflet called Depression for more details.

### Seasonal affective disorder light therapy

#### What is light therapy?

This treatment consists of sitting in front of a special bright light for a session each day. Light intensity is measured in lux. To treat SAD you need a light source of at least 2500 lux (about ten times that of ordinary light bulbs).

#### What does light treatment involve?

Special light boxes are made for the purpose of treating SAD. There are various shapes and sizes. Perhaps the most commonly used one is a box about the size of a sheet of A4 paper that stands on a desk or table.

Follow the instructions that come with the box. This may be something like:

- You start treatment in the autumn, as soon as symptoms begin. Ideally, you start treatment even before symptoms begin.
- You sit 2-3 feet away from the light box.
- You face the bright light but you do not have to look directly into it.

- The length of light therapy needed each day varies depending on the power of the light box you have. Follow the instructions with your light box.
- It is recommended that light therapy is carried out early in the morning as some studies suggest this works best; however, other studies do not confirm this.

Some people use a dawn simulator in winter, in addition to a light box. Dawn simulators are devices that slowly increase the room light. They gradually come on in the early morning over a period of around 60-90 minutes at the time just prior to when you normally wake up. There is no evidence to support the use of dawn stimulators but some people find it makes waking and getting up easier.

#### How does light therapy work?

It is not clear exactly how it works. It is not simply extending the length of the daylight hours.

#### How quickly does light therapy work?

Many people notice an improvement in symptoms within 3-4 days. If symptoms improve, they tend to stay improved so long as you keep on with treatment

#### Is light therapy safe?

There is a theoretical risk of damaging the retina. However, there do not seem to be any reports of harm with the specially designed light boxes. The light boxes used to treat SAD do not emit much ultraviolet (UV) light (the main damaging part of sunlight) to the skin and eyes.

Side-effects occur in some people and include headaches, difficulty sleeping after an evening session of light therapy, irritability and tiredness.

#### Who should not use light therapy?

You should speak with your doctor before using light therapy if you have:

- Retinal disease.
- Macular degeneration.

 Medication you take which increases your sensitivity to light (for example, some blood pressure medications, antibiotic medicines or cancer treatments).

**Note**: you should not use suntan machines as a source of bright light. The light from suntan machines gives off a lot of UV rays, which can harm your eyes and skin. It is best to use only the light boxes which are specifically made to treat SAD.

#### How can I obtain a light box or dawn simulator?

You cannot obtain a light box or dawn simulator from the NHS. If you wish to try one ensure it is from a reputable vendor and meets evidence-based guidelines. Some companies will allow you to try before you buy, to see if it works for you before you commit to buying a light box.

# Can seasonal affective disorder (SAD) be prevented?

There is no substantial evidence that you can prevent SAD.

## What is the outlook for seasonal affective disorder (SAD)?

In about 2 in 10 people with SAD, the condition goes away completely after a few years and treatment is then no longer needed. For the others, symptoms will often improve using the treatments discussed above.

### **Further reading**

- Lurie SJ, Gawinski B, Pierce D, et al; Seasonal affective disorder. Am Fam Physician. 2006 Nov 1;74(9):1521-4.
- Lewy AJ, Rough JN, Songer JB, et al; The phase shift hypothesis for the circadian component of winter depression. Dialogues Clin Neurosci. 2007;9(3):291-300.
- Seasonal Pattern Assessment Questionnaire (SPAQ)
- Galima SV, Vogel SR, Kowalski AW; Seasonal Affective Disorder: Common Questions and Answers. Am Fam Physician. 2020 Dec 1;102(11):668-672.

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