

## Delayed Sleep Phase Disorder

Delayed Sleep Phase Disorder (DSPD) is a circadian rhythm (body clock) problem. The body clock or circadian rhythm is controlled by a small group of cells within the suprachiasmatic nucleus within the brain that respond directly to sunlight. For most adults sleep occurs between 11pm and midnight and the maximum period of alertness from 7am or 8am. Some people have a slight tendency to be more alert earlier (morning larks) or prefer going to bed later (night owls).

People with DSPD have misaligned circadian timing so that they fall asleep two or more hours later than the average adult and subsequently wake later. E.g. someone may find that their ideal sleep time is between 3am and 4am and are ideal rise time is between 11am and midday. Importantly the quality of their sleep is generally good if they are allowed to sleep during their preferred sleep time. However, if they need to rise at 8am or 9am for work or school than they will become sleep deprived with subsequent impairment of daytime function.

## Symptoms of DSPD

Patients may present with the label of insomnia, but in fact their sleep pattern tends to be regular over a seven-day period, with a fixed but delayed time of sleep onset (when they fall asleep) and good quality sleep beyond that time if allowed to sleep for as long as they want. There is an association between DSPD and mood disturbance and in some patients, with the younger age of onset of symptoms, there is a family history.

## Treatment of DSPD

Lifestyle changes such as reducing caffeine and increasing exercise and exposure to bright light in the hours before bed can help. Keeping a regular schedule as well as using bright light therapy in the morning can also help to reset the clock. Melatonin is occasionally used to assist with resetting the clock and patients' habitual hours of waking.

