

Jet Lag

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Abstract

Objective: Travelers face very commonly jet lag but sometimes are not aware of the pathophysiological changes happening. The aim of this paper is to bring awareness of this condition.

Jet lag occurs when an individual travel across several time zones and as a result have trouble adjusting to their new schedule. After traveling long distances by air, your circadian rhythms may still be aligned with the previous time zone. When it is daytime in a new time zone your body may want to sleep, or when you are supposed to be asleep, it would want to be awake.

Jet lag is a temporary condition and may begin after you have travelled across two time zones. The severity is dependent on how many time zones you have crossed and the direction of travel. Flying east is usually more difficult of an adjustment when compared to travelling west. It is roughly estimated that your body clock takes approximately one day per time zone to be fully adjusted.

It may be found difficult to function as you normally would, if you are under jet lag. A feeling of awake and alertness would be lacking if you have to work, socialize or go exploring. Anyone can suffer from jet lag regardless of age, adults however, are likely to have more severe jet lag causing them to have a longer recovery period, than that of children. Some individuals are able to adjust more quickly than others to the rapid shifts in time zones. Persons that are accustomed to jet lag, such as pilots, flight attendants and frequent travelers, may have a less of an effect on them.

Jet lag can be worsened by, sleep loss due to travelling, stress, spending a prolonged time sitting in an uncomfortable position (such as an airplane), alcohol or caffeine use, the air pressure or poor quality of air.

Jet lag is a circadian rhythm sleep disorder. The circadian rhythms are the body's internal clock that signals when you should feel sleepy or alert. It operates on a 24-hours schedule basis. The body uses sunlight to determine the amount of melatonin (sleep inducing hormone) it should produce. Melatonin production is seen high during the evening and very low during the day. As a result, a person is more alert during the daytime and sleepy at night. Travelling across multiple time zones disturbs an individual's circadian rhythms.

Keywords: travelling, stress; Jet lag; motion sickness.