# JET LAG DISORDER

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Abstract:- The present paper explores a disorder which is often caused by any changes in the circadian rhythm of your body, it is termed or called as Jet lag disorder. The main cause of this disorder is changes in the rhythmic clock of your body when you travel across the time zones for a longer period of time .This jet lag disorder is characterized by both physiological and psychological symptoms .It can be treated both pharmacologically and non-pharmacologically, this article describes about the 14 tips to prevent this Jet Lag disorder.

# I. INTRODUCTION

The term Jet lag disorder is a physiological and a psychological illness resulting from changes in the body's circadian rhythm (normal timing) due to rapid long-distance (that is across the zone) travel. It is also called as flight fatigue, which causes fatigue, insomnia, and other symptoms temporarily as a result of air travel across time zones.

For example: if any one travels from New York to London feels like time was five to six hours early than the usual time that is the local time. Jet lag was earlier said to be a circadian rhythm sleep disorders

# II. CAUSES

The main cause identified in this condition is when the physiological function of the body's circadian rhythm is disturbed due to difference in time across the time zone .So when a person from New York comes or lands in Paris at 12 pm according to Paris time, his /her body continues to function its circadian rhythm according to new York time. So the body strives very hard to cope up with the new timings and the person will experience some of the temporary symptoms like insomnia, fatigue, irritability, and an impaired ability to concentrate .It may also bring disturbance in bowel and bladder functions and the person may have constipation or diarrhea. This happens when the cognitive function of the brain becomes impaired and lacks its judgmental functions and ends up into a confused state.

# III. TIME ZONE

Time zone means a geographical area in which there is same timings within the landmarks. Coming to the world we have 24 time zones ,set has 1 for each hour in a day .These time zones can be plotted from north to south that makes approximately 1000 miles .Thus when the earth revolves there is night at the hour in one time zone ,then after the time zone shifts to the west and 24 hour cycle continues .So if take an example of U.S if its 7am in the Eastern Time zone, it is 6 a.m. in the central zone, 5 a.m. in the mountain zone, and 3 a.m. in the Pacific zone.

## IV. SIGNS AND SYMPTOMS OF JET LAG DISORDER

The persons suffering from jet lag may experience many physical and emotional symptoms

- > Physical Symptoms
- The main physical symptom exhibited will be sleep disturbance. The person will have lack of sleep on his arrival and will exhibit sleep pattern disturbance, take a long time to fall asleep when flying towards east and wake up early before the timing when flying to the west.
- Other than the sleep disturbance person may show some other symptoms like heartbeat irregularities, constipation, diarrhea, nausea and indigestion.
- Cognitive Symptoms
- Confusion
- Irritability
- Difficulty concentrating
- Coordination problems
- > These symptoms include
- Poorer performance
- Headaches
- Irritability
- Anxiety

#### V. RISK FACTORS

Factors that increase the likelihood you'll experience jet lag include:

- Number of time zones crossed: It means if a person while travelling crosses many time zone then he or she is more likely to be jet lagged.
- Flying east: A person may feel more difficulty while flying in the east than the west because during your fly in east you lose time or lag behind in time and you gain time while flying in the west.
- Being a frequent flyer: This depends on one's profession .So being a Pilot, or an air hostess are at increased risk of jet lag disorder.
- Being an older adult: Geriatric people are at risk compared to youth.

# VI. TREATMENT MODALITIES IN JET LAG DISORDER

Jet lag is usually temporary and there is no need of treatment. Symptoms gradually improve in few days, but some times last longer than for a period of time.

# A. Medications

- Non benzodiazepines Zolpidem, and Eszopiclone can be used.
- Benzodiazepines Triazolam is preferable.
- Melatonin This can be taken in doses from 0.5 5 milligrams .Some studies show that if higher doses administered than person may have prolonged sleep over a period of time.

### B. Non Pharmacological therapies

# ➤ Light Therapy

From ancient days natural factors such as sunlight plays a vital role in cure of many diseases .So in jet lag disorder when a person travels ,his body should adjust to the environmental factors such as sunlight ,allowing one to sleep in the night and wake up in the morning .Thus light therapy can be used in treatment of jet lag disorder ,in which the person is exposed to artificial light like sunlight and then the person is supposed to be awake .This therapy is just done to orient the body to different time schedule.

# > Sunlight

Sunlight is the best natural tool to orient your body to the time zones, so plan your travel accordingly. For example when travelling in the west ,plan your flight timing mostly to reach your destination in the day to prevent lag of time .Simultaneously when plans to travel in the west zone, plan your flight schedule to destination in the night to prevent early reach in time .So orienting yourself to the day light helps the body to be awake. Along with the orientation some exercises can also help people to cope up with jet lag disorder.

# ➤ Caffeine

Avoid caffeine containing drinks such as coffee after noon because these drinks can cause difficulty in falling asleep later in the night. Use these drinks judiciously, preferably only in the morning to keep one fresh.

# VII. 14 TIPS, TO PREVENT JET LAG DISORDER PRIOR, DURING AND AFTER THE FLIGHT

# 1. Relax your schedule

Planning prior to the flight may help one out .if you are a person with scheduled timing of daily routine, try to be more flexible with your routine .Try to be flexible with timings of daily activities at least some days before your flight .Make necessary arrangements with your daily routine to make up your body to adjust to new time zone.

# 2. Get a good night's sleep before you fly

Plan your trip prior hand and try to get a good sleep before flying .Some people tend to have disturbances in their sleep schedule due to excitement and others due to fear. Only remedy to prevent jet lag will be a good sleep before travel will help you to keep your body's clock in time and prevent jet lag problems.

# 3. Avoid arriving at night

Plan your flight preferably to reach your destination in the day .Environmental factors such as sunlight will help you to be awake in the timings your supposed to be while travelling across the time zone.

# 4. Be plane savvy

Don't worry about the arrangements in the plane, necessary arrangements such as humidification system and LED lights will help you to cope up with the natural phase nature .so relax and travel.

# 5. Split up the trip

Try to split and fly, means try to take connecting flights while travelling across the time zone so that you get enough time to orient your body to the new time zone.

# 6. Avoid the bar

Try to keep yourself away from the bar in the flight because consuming alcohol during the travel can increase the tiredness level and person will feel more fatigue .Alcohol can add up making it even harder to beat the inevitable jet lag.

# 7. Dont takes Sleeping pills

Idea of taking sleeping pills is a bad idea in case of jet lag. These pills can only make you more lethargic when you land in your destination, so try to avoid it instead use some eye shield to make yourself fall asleep during the flight, or drink enough hot water which will stimulate you to sleep .if ok try with tea bags.

# 8. Say goodbye to coffee

Avoid caffeine and other beverages like coffee, cola and energy drinks. These drinks will only increase your problems in your travel instead opt for water which can keep your body more hydrated.

# 9. Set your watch

This is the best way to keep you psychologically fit, just prior to your flight set your watch timing to timing of your destination. Do not do this before your flight that you land up in making unnecessary excuses of missing your flight.

# 10. Keep on moving

As said 10 minutes' walk a day keeps doctor away, this implies in jet lag ,keep walking every hour or do slight exercise when travelling for a long hours. Carry DVT stocking as precautionary measure to keep yourself fit.

### 11. Eat right

Setting a right time schedule to feed yourself can keep you away from problems. A more extreme tip is to start eating three meals a day in line with the new time zone, even if that means cornflakes at 11pm.

## 12. Hunt for the sun

Getting exposed to sun light can help you to feel better and more oriented to day in different time zone.

### 13. Get some exercise

Do some quick stretching exercises to boost up your mechanism .You can go through some airline magazines to help you out.

### 14. Catch up on sleep

Try maximum to get enough sleep as such as you can, set some alarm to help you out to awake up on your arrival.

# VIII. CONCLUSION

As quoted "Prevention is better than cure ''it's always good to prevent yourself from being a victim to jet lag disorder. It is very important to know about the prevention and educate the public regarding the same, especially as Nurses we travel a long way for our job, so knowing the tips ,can help each one of us to prevent Jet lag disorder.

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