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AS A TEAM PHYSICIAN WITH PAKISTAN HOCKEY TEAM

1. JUNIOR WORLD CUP 2004 ROTTERDAM HOLLAND
2. AZLAN SHAH HOCKEY TOURNAMENTS 2007, 2012
3. JUNIOR WORLD CUP HOCKEY 2022 BHUBENESHWAR INDIA
4. 5 NATION TOURNAMENT PERTH AUSTRALIA 2013
5. ASIAN CHAMPIONS TROPHY JAPAN 2013
6. ASIAN GAMES INCHEON KOREA 2014
7. FIH TOURNAMENT HOLLAND 2015
8. CHAMPIONS TROPHY BHUBENESHWAR INDIA 2014



Title: *Travel Hazards & Jet Lag Management in Athletes*

Subtitle: *Managing Intercontinental Travel for Optimal Performance*

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Introduction Overview of the Problem:

- Intercontinental travel can disrupt an athlete's circadian rhythm.
- Jet lag affects performance, recovery, and overall well-being.
- Addressing travel hazards is essential for maintaining peak athletic performance.



What is Jet Lag?

■ **Definition:**

Jet lag occurs when an athlete's internal body clock is misaligned with the local time zone after long-haul flights.

■ **Symptoms of Jet Lag:**

- Fatigue and tiredness
- Disrupted sleep patterns
- Decreased mental clarity and concentration
- Gastrointestinal disturbances
- Decreased performance



■ **TIME AT YOUR PLACE**
3:00am



TIME AT DESTINATION
8:00am



MEAL TIME



Why is Jet Lag a Concern for Athletes?



■ **Performance Impacts:**

- Decreased endurance, strength, and reaction time
- Longer recovery times after exertion
- Increased risk of injuries due to physical and mental fatigue

■ **Psychological Effects:**

- Decreased motivation and focus
- Stress and mood swings due to travel disruption



Travel Hazards Beyond Jet Lag

- **Dehydration:**
 - Long flights and dry cabin air lead to dehydration.
- **Diminished Sleep Quality:**
 - Inconsistent sleep schedules during travel.
- **Poor Nutrition:**
 - Irregular eating patterns can negatively impact energy and recovery.
- **Immune System Stress:**
 - Exposure to new environments, travel fatigue, and stress can reduce immune function.

Effects of Inconsistent Sleep on Sport Shooters



- **Vision**

- Reduced visual focus and sharpness
- Increased eye fatigue and difficulty maintaining a clear picture
- Slower visual processing and reaction time
- Difficulty maintaining concentration for long periods

- **Body Condition**

- Reduced balance and postural stability
- Lower muscle recovery and physical endurance
- Decreased coordination and body control
- Increased fatigue during training and competition

- **Key Point:**

Consistent, quality sleep supports visual focus, concentration, balance, coordination, and physical recovery—important factors for precision sport shooters.



HOW CAN ONE IMPROVE BALANCE AND COORDINATION



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Better balance and coordination help sport shooters maintain a stable posture, control their body, and stay consistent during practice and competition.



1. BALANCE TRAINING

Use a balance board, BOSU ball or single-leg stands. Helps improve stability and body control.



2. CORE STABILITY

Exercises like planks, dead bugs and bird-dogs build a strong core, which improves balance and control.



3. AGILITY DRILLS

Use ladder drills, side steps and quick footwork. Improves coordination and reaction time.



4. HAND-EYE COORDINATION

Try ball toss, catch, or reaction drills. Helps connect your vision with body movement.



5. FLEXIBILITY & MOBILITY

Stretching and mobility work keeps your joints healthy and improves range of motion.



6. LOWER BODY STRENGTH

Squats, lunges and single-leg exercises build stability and improve overall coordination.



7. POSTURE CONTROL

Practice exercises that keep your spine aligned and shoulders relaxed. Good posture improves balance.



8. CARDIO FITNESS

Running, cycling or skipping improves endurance, reduces fatigue and supports better coordination.



REMEMBER: Progress takes time. Train consistently, focus on good form, and combine these exercises with proper rest and nutrition.

*Better balance. Better control.
Better performance.*

Strategies to Manage Jet Lag in Athletes



- **1. Pre-Travel Preparation:**
- **Adjust Sleep Schedule:** Gradually shift sleep and wake times a few days before travel.
- **Optimize Rest:** Ensure good quality rest before departure to build a sleep debt buffer.
- **Stay Hydrated:** Increase water intake leading up to the trip to prevent dehydration.
- **2. During Travel:**
- **Stay Active on the Plane:** Perform simple stretches and movements to reduce stiffness and improve circulation.
- **Hydrate Frequently:** Drink water regularly to counteract dehydration, avoid alcohol and caffeine.
- **Eat Strategically:** Opt for light meals high in protein and low in sugar to maintain energy levels.



TRAVEL HAZARDS BEYOND JET LAG





TRAVEL HAZARDS BEYOND JET LAG

- **HOW TO AVOID INFECTIONS DURING LONG AIR TRAVEL**

- **COMMONIST AIRBORNE INFECTIONS**

INFLUENZA, MEASLES, SEVERE ACUTE RESPIRATORY SYMDROME, TUBERCULOSIS, SMALLPOX

SAFETY MEASURES

- 1. WINDOW SEAT, AVOID AISTLE**
- 2. WEAR MASK**
- 3. USE SANITIZER**

Post-Travel Management



- **1. Re-aligning to New Time Zone:**
- **Sun Exposure:** Spend time outdoors during daylight hours to reset your body clock.
- **Melatonin Supplements:** Consider using melatonin to help regulate sleep cycles when necessary.
- **Avoid Napping:** Resist the urge to nap during the day, as it can prolong jet lag symptoms.
- **2. Sleep Hygiene:**
- Maintain a consistent sleep schedule upon arrival, even if it's difficult at first.
- Create a restful sleep environment: quiet, cool, and dark room.



Dietary Considerations for Recovery

- **Balanced Nutrition:**
 - Prioritize meals rich in complex carbs, lean proteins, and healthy fats to aid in recovery.
- **Avoid Heavy Meals Before Bed:**
 - Large meals can disrupt sleep, making it harder for athletes to adapt to the new time zone.



Use of Technology

- **Jet Lag Apps:** Apps that help athletes manage their sleep and light exposure.
- **Sleep Trackers:** Devices that monitor sleep quality and aid in tracking progress.
- **Light Therapy:** Consider using portable light devices to help with circadian rhythm adjustment.



Role of Coaches and Support Staff

- **Monitoring Recovery:**

- Coaches can monitor sleep and recovery to ensure the athlete is adjusting.

- **Adjustment Time:**

- Allow enough time for the athlete to adapt to the new time zone before critical events or matches



Case Study (Optional)

- A high-profile athlete's journey with managing jet lag during intercontinental travel and how they optimized their recovery.



Conclusion

- **Key Takeaways:**
- Jet lag is a significant travel hazard that can affect athletic performance.
- Proactive management strategies (pre-travel preparation, hydration, sleep, and nutrition) are crucial.
- Coaches, support staff, and athletes must work together for effective adaptation.



THANKYOU