TRAVEL RELATED ILLNESS: IS THIS PROBLEM SERIOUS?

- 49% – 59% of the travelers have medical problem during their trip
- 26% - 18% of the travelers seek medical advice during their trip
- 5% of the travelers are hospitalised
- 48% of the travelers turn to their GPs after returning home
- 6% of the travelers need sick-pension after returning home

TRAVEL – RELATED MEDICAL PROBLEMS

Before the trip: pre-existing (chronic) diseases; acute illnesses

During the trip: travel related illnesses

After returning home: acquired diseases, imported infections

TRAVELRELATED ILLNESS:

- The pathogen factor is the trip itself (real travel illnesses)
- Local hazards: the pathogen factor is the exposure at destination
- The trip is an accidental factor to the illness
- The preexisting disease is deteriorated by the trip

Among 100,000 travelers

- 50,000 will develop some sort of health problem during the course of their trip
- 8,000 will see a physician
- 5,000 will be confined to bed
- 300 will have to be hospitalised either during their trip or upon their return
- 50 travelers will have to be air-evacuated
- 1,000 travelers will be incapacitated in their work either abroad or upon returning home
- 1 traveler will die

ISTM Professional education and Training committee: Introduction to Travel Medicine, 2. kiadás, 2008
The pathogen factor is the trip itself
- Movement-related diseases (jet-lag, DVT, motion sickness)
- Illnesses resulting from travel-related stress (fatigue, traveling psychosis, obstipation, etc.)

The pathogen factor is the exposure at destination
- Illness resulting from the temperature and altitude extremes
- Infectious diseases including STD
- Traveller’s diarrhea
- Orthopaedic problems
- Marine & wildlife hazards
- Socio-economic problems

Traveling is an accidental factor to the illness
- Accidents and injuries
- Cardio-vascular acute events
- Acute cerebral events
- Surgical illnesses
- Upper respiratory illnesses (URI)
- Urinary infections
- Dermatology problems
- Orthopaedic emergencies

The pre-existing disease (or the health status) is exacerbated or deteriorated by traveling
- Coronary diseases, hypertonia
- COPD, asthma
- Allergy
- Diabetes and other metabolic disorders
- Urinary tract problems (hypertrophy of prostate)
- Pregnancy

Health status of the traveler
- Healthy traveler
- Traveler with acute medical problem before the trip
- Traveler with pre-existing disease(s)
- Traveler, who is suffering from acute, travel-related disease during the journey
### Travelers with different health status

<table>
<thead>
<tr>
<th>Health status of traveler</th>
<th>Aim of prevention</th>
<th>Prevention methods</th>
<th>Prevention provided by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy traveler</td>
<td>Prevention of travel-related medical problem</td>
<td>Vaccination, chemoprofilaxis, medical advice</td>
<td>GP, occupational medicine, travel medicine specialist, pharmacist</td>
</tr>
<tr>
<td>Patients with pre-existing diseases</td>
<td>Preventing the decompensation of the pre-existing disease, make the disease balanced</td>
<td>Medical treatment, medical advice</td>
<td>GP, occupational medicine, travel medicine specialist</td>
</tr>
<tr>
<td>Patients with acute diseases</td>
<td>Prevent complications</td>
<td>Definitive treatment</td>
<td>GP, family doctor</td>
</tr>
<tr>
<td>Patients suffering from travel-related diseases</td>
<td>Begin the treatment, prevention of further medical damage</td>
<td>Consultation, treatment</td>
<td>Local medical provider, hospital doctor, emergency physician</td>
</tr>
</tbody>
</table>

### Risk factors of traveling

#### Traveler’s own risk factors

1. Health-status
2. Age
3. Physical condition and training
4. Travel attitudes

#### Risk factors of the destination and mode of traveling

**Danger...**

Likelihood that the danger would occure:

100%

The risk is 100%

**Loss:**

1 pc. parachute + 1 pc. parachutist
**High-risk patient groups**

- Pregnancy and childhood
- Immunocompromised patients
- Patient with imbalanced preexisting diseases (incl. mental problems)

**High-risk traveler groups**

- Traveler with children
- Elderly people
- Young people (backpackers)

**Risky attitudes:**

- Non-safe sex
- Neglected food and drinking restrictions
- Deliberated contact with animals
- Swimming in infected or dangerous water
- Traveling at night or alone
- Ostentatious „tourist-like” behaviour

**Personal safety # 1**

- Self medication kit
- Properly hidden handbag
- Water bottle
- Extraordinary clothes, hat
- Easy prey: open bag
- Incredibly inappropriate shoe

It looks like a stupid, ignorant and offensive foreign tourist
Personal safety # 2
- wearing sunglasses and hat in hot temperature
- wearing adequate breathable clothes in hot temperature
- seductiveness of the open photo-bag
- general appearance of a defenceless tourist

Risk factors of traveling
- Health-care, hygienic condition and political situation at destination country (incl. endemic areas, civil war, terrorism)
- Geographic position of the area
- Duration of traveling
- Traveler’s activity at destination
- Type of residence at destination

TRAVEL TYPES

„Joyride”
(holiday tourist, holidaymakers)
- Holiday, cultural and shopping-tourism
- Recreational sports, leisure-sports, adventure and survivor tours

„Travel for duty”
(business tourism)
- Business trip, congresses
- Pilgrimage
- Long-term travel abroad (migration, guest-workers, military and humanitarian actions, participants of travel business, employees of transport companies, students, politicians, etc.)

The „4 S” holiday:
- Sun
- Sea
- Sand
- Sex

The „4 S”
- Sun
- Sea
- Sand
- Sex

Types of travel
- risks
- typical diseases
- preparation of traveler

Holiday tourism
- holidaymakers
- short term
- environmental risks, endemic infections, accidents, exacerbation of pre-existing illnesses
- environmental hazards, infections, mosquito bite, STD
- fill-for-travel certification, medical advice, vaccination

Types of travel
- peculiarities of travel
- preparation of traveler
types of travel | peculiarity of travel | risks | typical diseases | preparation of traveler
---|---|---|---|---
adventure travelling, expedition, leisure sports | sport in foreign environment and circumstances, far from medical facilities | environmental risks, accidents, injuries, overloading the musculoskeletal system | diarrhoea, infections, bites, traumatologic orthopedic problems | physical training, vaccinations, medical advice
business trip, pilgrimage | several destinations, various quality medical facilities | different climate and time zones, local infections, accidents, STD | travelers’ diarrhoea, food poisoning, psychiatric stress, STDs, vegetative dysfunctions, jet lag, fatigue | vaccination, pretravel advice, fit-for-travel, check-up
long-term travel (expatriots, diplomatic mission, education abroad) | long term staying abroad, integration into the local health care system | local infections, accidents, exacerbation of preexisting diseases, STD | infections, psychosocial stress, exacerbation of chronic illnesses, dental problems, STDs, vegetative dysfunctions | vaccination, medical screening before travel, travel medicine advice, regular check-ups

Thank you for your attention!