## Travel Medicine, the New Code of Medical Ethics and Soccer Played in Thin Air



Ricardo Pereira Igreja<sup>1</sup>

 Department of Preventive Medicine, Medicine College, Federal University of Rio de Janeiro
 Rio de Janeiro, RJ.

## Mailing address:

Rua Professor Rodolpho Paulo Rocco, 21941-617 - Rio de Janeiro RJ - Brasil E-mail: rpigreja@cives.ufri.br The goal of Travel Medicine is to reduce the risks of morbidity and mortality associated with travelling, creating awareness on the travelers as well as promoting the use of preventive measures.

In addition to the Infectious and Parasitary Diseases, the field of the Travel Medicine involves many and diverse attributions, such as counseling on eating precautions, protection against, vector-borne diseases and bites of arthropods and other dangerous animals, problems connected to water consumption, diving, altitude, sun exposure, heat, cold and effects of the difference of local times.

In Brazil, the first service on Travel Medicine, *Cives*, was created in 1997 by the initiative of some professors of Infectious and Parasitary Diseases of the Medicine College of UFRJ<sup>(1)</sup>. Since then, individuals who traveled to various destinations inside and outside the country have been helped. The reasons why many of these people traveled to places located in altitudes considered high were diverse, such as: a work meeting in La Paz; honeymoon in Cuzco or trekking in Nepal.

A trip to regions located in altitude considered high places the traveler's health under fairly known risks in medicine, and can cause the so-called altitude sickness. Pollard and Murdoch, in the book "The high altitude Medicine handbook"<sup>(2)</sup>, define high altitude as that above 2,500 meters (in that altitude there is only 71% of oxygen available at sea level). They describe the acute mountain sickness, which is the milder form of the altitude sickness, as a set of symptoms composed of headache, nausea, vomiting, tiredness, loss of appetite, dizziness and sleep disorders. According to Décio Lopes, in his blog "Expresso da Bola", when he arrived in Quito (2,850m)," as soon as you leave the airport, you suddenly realise you have a mild headache, a weird discomfort which, somehow disturbs your thinking and causes sickness"<sup>(3)</sup>. It is interesting that the Brazilian journalist's account greatly agrees with the description of the medical text.

The Best prevention for this disease is to plan a gradual rise, with rest in the intermediate altitudes. In case it is not possible, the use of a medication named acetazolamide is recommended<sup>(3-5)</sup>. However, since this medication is a diuretic, it cannot be used by athletes in competition<sup>(6)</sup>. Additionally, physical exertion should be avoided, since it can be a triggering factor for altitude sickness<sup>(2)</sup>. So, what can be done to soccer players who will play a match in high altitude when there is no time for acclimatization? These are athletes who depend on their physical integrity to live, exposed to a risk situation, in which there is an indication of preventive measure which cannot be used though. According to the new Code of Medical Ethics, active since April 13, 2010, in the article 32, Chapter V, "It is banned to the physician: To refuse to use all available means of diagnosis and treatment, scientifically acknowledged and within his reach, in favor of the patient"(7). The use of acetazolamide as a prophylactic treatment of the acute altitude sickness is strongly recommended and with evidence of high quality (1A level of Medicine Based on Evidence), being recommended by great specialists on the topic, including by the Centers for Disease Control and Prevention and Wilderness Medical Society, both from the USA<sup>(4,5)</sup>. And what is the role of the physicians of the soccer clubs in these cases, besides giving assistance to the players on the field with supplemental oxygen cylinders? Some of the people who are in favor of the games in altitude declare there has never been any death during a match. Even if it is true, it is a very weak justification, which obviously has no background. The competent medical organs should discuss about this situation and take a decision about the topic, since the Medical Ethics has no relation with the interests of soccer confederations. It is crucial that there is higher medical participation in these debates, since besides the athletes' health, the Medical Ethics is also game on this field.

## **REFERENCES**

- Igreja RP. Medicina de Viagem: uma nova área de atuação para o especialista em Doenças Infecciosas e Parasitárias. Rev Soc Bras Med Trop 2003;36:539-40.
- 2. Pollard AJ, Murdoch DR. The High Altitude Medicine Handbook. Delhi: Book Faith India, 1998.
- 3. Lopes D. Hora do sacrifício. 25/11/09. Disponível em: http://colunas.sportv.globo.com/expressodabola/. Acesso em: 19 de abril de 2010.
- Centers for Disease Control and Prevention. Health Information for International Travel 2008.
  Atlanta: US Department of Health and Human Services, Public Health Service, 2007.
- Luks AM, McIntosh SE, Grissom, CK, Auerbach PS, Rodway GW, Schoene RB, et al. Wilderness Medical Society Consensus Guidelines for the Prevention and Treatment of Acute Altitude Illness. Wilderness Environ Med. 2008;19:293-303.
- World Anti-Doping Agency. The World Anti-Doping Code. The 2010 Prohibited List. Disponível em: http://www.wada-ama.org/Documents/World\_Anti-Doping\_Program/WADP- Prohibitedlist/WADA\_ Prohibited\_List\_2010\_EN.pdf. Acesso em: 19 de abril de 2010.
- Código de Ética Médica. Disponível em: http://www.portalmedico.org.br/novocodigo/integra. asp. Acesso em: 19 de abril de 2010.