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parvum, Endolimax nana + B. hominis. Others: Shigella flexneri (1), Dengue (1), Rickettsiosis (1).

>30 days, 15 cases (34.9%, average 54 days). Aetiology: *E. coli* (11): 1 ETEC + *E. histolytica* and 1 EAEC. Parasites (4): *G. intestinalis* (1+*B. hominis*).

In 3 cases of the last group diarrhoea lasted more than 300 days. From the beginning of the travel, diarrhoea started in <7 days in 10 cases (23.3%), between 7–15 days in 21 cases (48.8%) and >15 days in 12 cases (27.9%). 20 cases (46.5%) developed invasive diarrhoea. Fever in 16 cases (37.2%) and abdominal pain in 31 cases (72.1%) appeared as associated symptom.

Conclusions: Escherichia coli was the most frequent isolated germen in a important number of parasite-associated cases (multifactorial aetiology?). E. coli diarrhogenic strain was not able to be confirmed by PCR in some cases. In this study we cannot conclude that chronic diarrhoeas are of parasitical aetiology. Microbiological study of faeces of travellers with diarrhoea arriving from tropical countries must be done to rule out potentially treatable bacterial and parasitical aetiology.

## | P1511 | A retrospective study of 230 consecutive patients hospitalised after transcontinental travel

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**Objectives:** With the current craze for transcontinental travels, infectious diseases consultants practicing in Europe or Northern America hospitals need to be well aware of the distribution of diseases in hospitalised returning travelers and migrants. Our study adds to the previous which tried to characterise causes of consultation and/or hospital admission after traveling. Its purpose is to better define preventive measures in patients who consult before traveling and to guide diagnostic investigations in patients who return ill after traveling abroad.

Methods: We reviewed 230 consecutive patients who were hospitalised in our infectious diseases unit between January 2000 and March 2006 after traveling to another continent. We conducted a retrospective observational study. Cases were identified by our computerised database system. Data were extracted from medical charts, including demographic variables, travel conditions, diagnostic workout, treatment and outcome. Results: Male to female ratio was 1.58; median age was 33 years and median time from travel to hospitalisation was 13 days. Among the travelers, 52% were tourists, 28% were long term expatriates, 8% worked for humanitarian organisations, 10% visited their relatives or friends, and 26% couldn't be classified. The main destination of travel was sub-Saharan Africa (70.9%), much more frequent than Southern Asia (8.2%) or Northern Africa (8.2%). Malaria was the most common diagnosis (49.1%), followed by gastroenteritis (13.0%), viral hepatitis (6.1%), and bacterial pneumonia (4.3%). A significant proportion of patients were diagnosed with tuberculosis (5.2%) or HIV infection (4.3%) but the link between recent travel and these pathologies could not be ascertained. Rare diseases with potential nosocomial transmission were also observed, including severe acute respiratory syndrome (SARS) and Crimean-Congo haemorrhagic fever.

Conclusion: Even if the study was not limited to febrile illnesses, malaria remains the first cause of hospitalisation after traveling to another continent. Owing to the diversity of tropical pathologies and to the increase of travel to developing countries, this study underscores the need to maintain tropical expertise for physicians in charge of patients who return ill from travel. A substantial proportion of these diseases may be prevented by validated protective measures.

## **P1512** Wave of undocumented migrants in the Canary Islands: new challenges for European microbiologists

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Introduction: From June to October 2006, 25,000 undocumented immigrants from West Africa have reached the Canary Islands by boat

from the coast of Senegal and Mauritania, i.e. 3 times the number during the first 5 months of 2006 and around five times the total for the whole of last year. Most have arrived in Tenerife. The aim of this work was to evaluate the impact of this immigrants' wave for the laboratory of microbiology of the University Hospital of Canary Islands (HUC).

Methods: The samples received and the results obtained in the section of parasitology were assessed differentiating two periods: January-May and June-October, 2006. Parasite examination was performed in faecal specimens, urine and broncho-alveolar lavage (BAL) after concentration by microscopic exam with iodine, trichrome and Kinyoun staining. Graham test to pinworm screening was also performed. Blood samples were analysed by thin and thick blood films stained with Giemsa stain. Results: During the first period of study (January-May) approximately 8,000 undocumented immigrants arrived to Canary Islands. During this period the parasitology section of the HUC received a total of 953 samples for detection of parasites: 783 stool samples, 160 Graham tests and 10 blood samples. Only 3 samples were positives for Giardia lamblia (1) and Entamoeba coli (2) and no cases of malaria were detected. From June to October the number of immigrants rose 25,000 individuals. The total number of samples received for detection of parasites ascended to 1,527: 1,239 stool samples, 221 Graham tests, 7 urines, 2 BAL and 58 blood samples. Significant increase in the number of isolates and diversity of pathogens were observed comparing to the first period: Ancylostoma duodenale (2), Ascaris lumbricoides (7), Giardia lamblia (6), Entamoeba coli (29), Endolimax nana (8), Iodamoeba bütschlii (2), Enterobius vermicularis (5), Schistosoma haematobium (2) and Plasmodium falciparum (12).

**Conclusion:** Both the number and the variety of samples and techniques realised as well as the parasites observed have increased in the last five months coinciding with a new wave of undocumented migrants arrived this summer to the Canary Islands. This should make us think about the need to guarantee the necessary human and material resources as well as training and update courses in parasitology.

## P1513 KAP evaluation about travel medicine in international travellers and medical students in Chile

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**Objectives:** To determinate knowledge, attitude and practices (KAP) about Travel Medicine on International Travelers and Medical Students. **Methods:** A KAP instrument was designed, constituted by 24 questions (questionnaire), answered by 100 international travelers (at the "Arturo Merino Benítez" International Airport of Santiago), and 100 Antofagasta's Medical Students (randomly selected), exploring knowledge about Travel Medicine, traveler diseases, morbidity and prevention of them among interviewed people. Analyses were made with SPSS 10 and Epi Info 6 (confidence 95%).

**Results:** Mean age was  $44.9\pm12.3$  y-old (travelers) and  $22.6\pm3.0$  y-old (medical students) (p < 0.001). In travelers 83% were universitary professionals. Medical students, 49% were at 3° year. From the total, 78.5% stated as unknowners of Travel Medicine (90% travelers, 67% medical students; p < 0.001); 92% perceived health risks traveling (94% and 90% respectively). Malaria was the disease recognized as more risky (10%; 13% medical students and 7% travelers). From the total, 5% stated get sick during international trips (6% and 4%, respectively). Travelers stated in 56% being non-informed about sanitary conditions of their destinations and 3% have some vaccination (2% YF, 1% HBV). Travelers were 93% chilean going in 60% to tropical countries.

**Conclusions:** These results indicated the importance of Travel Medicine in those countries where the knowledge of tropical diseases (malaria, dengue, yellow fever, etc), is lower given their inexistence, and where the traveling pattern indicates a great proportion of people visiting risk zones for the acquisition of these pathologies, and without the prevention due to lack of knowledge and immunisation against them.