

Centre for Echinococcosis and Rare Tropical Diseases

In our globalised world, it has become increasingly difficult to classify viral, bacterial and parasitic diseases as belonging to the “tropics” and “subtropics”. In 2012, the one-billion mark of international tourist arrivals by plane was crossed; Asia and the Pacific recorded 216 million international tourist arrivals, while Africa saw 50 million international tourists. Patients suffering from “tropical” infectious diseases are looking for help far beyond the “tropics” and “subtropics”. This involves returning travellers as well as people born and raised in the “tropics” and “subtropics” who have found the new centre of their life in our part of the world. They rely on us to know, diagnose and treat their problems. In this respect, the infection can have been contracted a long time ago.

Range of Diseases

Tropical medicine involves any rare infectious and tropical diseases imported to our regions.

During our special consultation sessions on echinococcosis, we diagnose and treat patients with both alveolar (fox tapeworm) and cystic (dog tapeworm) echinococcosis. Alveolar echinococcosis also occurs in Germany and is expanding, while cystic echinococcosis is almost exclusively imported.

We offer the full range of services associated with the diagnosis and treatment of tropical diseases. In our tropical medicine outpatient clinic and during our special consultation sessions on echinococcosis, we examine approx. 4,100 patients each year. The “most common” disease patterns are listed below:

Parasitic Diseases

Malaria, Sleeping sickness, Schistosomiasis, Strongyloidiasis, Filariases, Neurocysticercosis, Intestinal parasitic diseases, Toxoplasmosis (especially in immunocompromised patients and pregnant women), Cystic echinococcosis (dog tapeworm), Alveolar echinococcosis (fox tapeworm)

Bacterial Infections including Rickettsial Diseases

Typhoid fever, Leptospirosis, Melioidosis, Rickettsial diseases occurring in southern Europe and Africa; scrub typhus

Mycobacterial Infections

Buruli ulcer, Extrapulmonary tuberculosis, Leprosy

Viral Infections

Dengue, Japanese encephalitis, Chikungunya, Ross River infections, Rabies

Range of Services

The tropical medicine outpatient clinic offers a 24/7 emergency service for imported infectious diseases at Heidelberg University Hospital.

A national consultation service for the diagnosis and treatment of echinococcosis has been established.

All current diagnostic methods are available in the laboratories of the Section Clinical Tropical Medicine and the Department of Parasitology. The two laboratories form a single functional unit and are supervised by specialists of the tropical medicine outpatient clinic (accredited status since 02/2003).

The outpatient clinic is part of the network of

- (1) the German tropical medicine institutions
(M. Stojkovic is a member of the guidelines commission of the German Society for Tropical Medicine and International Health (DTG))
- (2) the German Society for Tropical Medicine and International Health (DTG)
(T. Junghanss is a member of the guidelines commission of the DTG)
- (3) the Federation of European Societies for Tropical Medicine and International Health (FESTMIH)
(T. Junghanss is the DTG delegate to FESTMIH)
- (4) the WHO Informal Working Group on Echinococcosis (WHO-IWGE)
(T. Junghanss is the Chair of WHO-IWGE from 2016–2018 and thus involved in the revision of the international guidelines on diagnosis and treatment; M. Stojkovic is a member of the 2016–2018 Steering Committee of WHO-IWGE)
- (5) tropical medicine institutions in Southeast Asia, North and sub-Saharan Africa and Latin America, especially as a result of our longstanding coordination activities in projects on malaria, echinococcosis, dengue and epidemic bacterial meningitis.

Staff

- Prof. Dr. med. Thomas Junghanss
- Dr. med. Annette Kapaun
- Dr. med. Marija Stojkovic

The Section Clinical Tropical Medicine offers consultations in its outpatient clinic as well as special consultation sessions on echinococcosis.

Interdisciplinary meetings on the diagnosis and treatment of patients are held with the Department of Diagnostic and Interventional Radiology (weekly radiological conferences), the Department of Surgery and the Thoraxklinik Heidelberg, the Interdisciplinary Endoscopy Center, Gastroenterology (intensive care for patients with complicated malaria) and, depending on the organs involved and the patient's age, with the organ-specific centres/departments and the Center for Child and Adolescent Medicine, respectively.

Cooperation

- Department for Infectious Diseases, Parasitology, Heidelberg University Hospital
- Centre for Infectious Diseases, Virology, Heidelberg University Hospital
- Centre for Infectious Diseases, Medical Microbiology and Hygiene, Heidelberg University Hospital
- Diagnostic and Interventional Radiology, Department of Radiology
- General, Visceral and Transplantation Surgery, Department of Surgery
- Thoraxklinik Heidelberg
- Interdisciplinary Endoscopy Center at Heidelberg University Hospital
- Gastroenterology, Infectious Diseases, Intoxication (Internal Medicine IV), Department of Internal Medicine
- Center for Child and Adolescent Medicine at Heidelberg University Hospital
- Cardiology, Angiology and Pneumology (Internal Medicine III), Department of Internal Medicine
- Department of Ophthalmology at Heidelberg University Hospital
- Institute of Pathology

Research

The Section Clinical Tropical Medicine has been involved in studies for many years and coordinates GCP-compliant clinical trials on Buruli ulcer (Cameroon), dengue (Southeast Asia and Latin America) and cystic echinococcosis.

The focus of our research is on:

- **Dengue**

The Section Clinical Tropical Medicine coordinates the interdisciplinary EU-funded (7th Framework Programme) research consortium IDAMS (<http://www.idams.eu/>) with partners in Southeast Asia, Latin America, sub-Saharan Africa and Europe, including WHO/TDR. IDAMS is the successor project to the EU-funded (6th Framework Programme) dengue research consortium DENCO. Dr. med. Thomas Jaenisch coordinates the dengue working group and the research consortium IDAMS.

- The mycobacterial infection **Buruli ulcer**

In the field of Buruli ulcer, we have been working with partners in Ghana, Cameroon and Switzerland for many years. The research project is funded by the Volkswagen Foundation. The Coordination Centre for Clinical Trials (KKS) Heidelberg monitors our clinical treatment trial in Cameroon. Prof. Dr. med. T. Junghanss coordinates the Buruli ulcer working group.

- Epidemic bacterial **meningitis**

In the field of epidemic meningitis, our partners are based in Burkina Faso (CRSN in Nouna), Ghana (NHRC in Navrongo) and Switzerland (Swiss TPH in Basle).

- Cystic **echinococcosis**

We coordinated a EU-funded project on cystic echinococcosis (EchinoNet) over several years, with partners in the main endemic areas of the Mediterranean region (Italy, Spain, Portugal, Morocco, Tunisia, Egypt, Jordan and Turkey). Another project connects us with a treatment centre in Lima (Peru), which is another highly endemic area for cystic echinococcosis. The focus of our research is on cyst staging and on the treatment of CE patients based on cyst stage. Dr. med. Marija Stojkovic coordinates the echinococcosis working group.

Spokesperson

Dr. med. Marija Stojkovic, Section Clinical Tropical Medicine

Prof. Dr. med. Thomas Junghanss, Head of the Section Clinical Tropical Medicine (deputy spokesperson)