Department of Dermatology and Venereology

Department of Dermatology and Venereology Faculty Hospital and Medical Faculty of Charles University in Hradec Králové is a workplace dealing with complex treatment of all diseases falling under the field of dermatovenerology. In addition to providing quality curative and preventive care, it provides comprehensive undergraduate and postgraduate education and continuous scientific activities. In the outpatient section, the clinic operates a general outpatient clinic (for adults and children) and specialised outpatient clinics (professional dermatosis clinic, venereological outpatient clinic, wound healing clinic, blistering dermatosis clinic, dark skin tumour clinic, dermatoscopic outpatient clinic, lymphology outpatient clinic, phototherapy, room for minor surgical excisions). In addition to the outpatient section, the clinic has an inpatient section for both adult and paediatric patients.

One of the current priorities of curative and preventive care is the analysis of the results of biological treatment in patients with psoriasis, atopic dermatitis, hidradenitis and chronic urticaria. The Department of Dermatology and Venereology also focuses on the prevention, diagnosis and treatment of skin cancer, both melanoma and non-melanoma skin tumours. In recent years, there have been significant developments in wound healing and lymphology.

Department of Dermatology and Venereology is equipped with a number of modern devices (e.g. for phototherapy, lymphology, dermatoscopy, participates in laser treatment, equipment for minor dermatological procedures, including equipment for minor surgical excisions, etc.).

Department of Dermatology and Venereology cooperates with many other departments and clinics at the Hradec Králové University Hospital and the Faculty of Medicine of the Charles University in Hradec Králové in the framework of curative and preventive care. Close interdisciplinary cooperation includes the care of patients with autoimmune blistering dermatoses (cooperation with the Periodontology Department of the Stomatology clinic), patients with allergies (cooperation with the Institute of Clinical Immunology and Allergy). In the treatment of skin cancer there is close cooperation with the Department of Oncology and Radiotherapy and the Surgical Clinic (with the Department of Plastic Surgery) and with the Department of Otorhinolaryngology and Head and Neck Surgery. Cooperation with the Fingerland Institute of Pathology continues in the field of dermatohistopathology. Another important area of cooperation with the Gynaecology and Urology Clinic (and with the Hradec Králové Public Health Service) is the epidemiological situation of sexually transmitted diseases and the provision of the widest possible range of modern diagnostic methods in the system of "surveillance" of these diseases.

The clinic has the status of an accredited department with the possibility of further training of doctors and thus provides the possibility of preparing residents for certification with professional erudition both theoretically and practically. Continuous scientific activities are carried out in the field of science and research. Within the framework of research, cooperation is established with other disciplines and clinics at the Hradec Králové Faculty of Medicine and Hospital (Institute of Clinical Immunology and Allergy, Institute of Clinical Biochemistry and Diagnostics, Institute of Preventive Medicine), as well as with the Technical University of Liberec.

Research activities are carried out with the support of the Cooperatio project, of Charles University and internal projects are submitted within the Faculty Hospital. For the strategic development of the clinic, efforts are made to obtain the status of an accredited department for the possibility of doctoral studies in the field of dermatovenerology. Department of Dermatology and Venereology organises professional seminars for doctors in the field of dermatovenerology (3 - 4 times a year) and from 2023 organises a national event Hradec Dermatovenerology Days (once a year). In addition, it is also a traditional professional guarantor and organizer of national dermatovenerology

Physicians of the clinic publish in Czech and international journals, participate in domestic research activities and lecture at domestic and international events (congresses of the European Academy of Dermatovenerology, congresses of Czech-Slovak Dermatology, National Dermatology Congresses, regional seminars, from 2023 the Hradec Days congress, etc.).

In recent years, physicians have also contributed to a number of textbooks (Salavec - Clinical Dermatovenerology, volumes 1 and 2; Differential Diagnosis in Dermatovenerology; Ocular Manifestations of Systemic Diseases - Salavec, Bartlová). They repeatedly prepare teaching scripts in dermatovenerology and they are authors of textbooks and monographs (Ettler, Bělobrádek, Salavec). Some of doctors are principal investigators or co-investigators of grant

events such as conferences in Lipová and others.

projects (Ettler, Čelakovská) and authors of publications with impact factor (Čelakovská, Ettler, Salavec, Hamáková and others). Doctors of the clinic are co-investigators of international clinical trials in the field of psoriasis and atopic dermatitis.

Main research topics

- <u>doc. MUDr. Jarmila Čelakovská, Ph.D.</u> Examination of specific IgE by molecular component diagnostics in patients with atopic dermatitis. The significance of food allergy in patients with atopic dermatitis. (cooperation with the Institute of Clinical Immunology and Allergy of Medical Faculty and Faculty Hospital Hradec Králové)
- doc. MUDr. Jarmila Čelakovská, Ph.D. Investigation of the immunological profile in patients with atopic dermatitis.
 Immunophenotyping by flow cytometry, evaluation of surface CD markers expression and interleukin levels (cooperation with the Institute of Clinical Immunology and Allergy Medical Faculty and Faculty Hospital Hradec Králové).
- <u>MUDr. Simona Vachatová, Ph.D.</u> Influence of metabolic syndrome on biological age in patients with psoriasis (collaboration with the Institute of Preventive Medicine of Medical Faculty Hradec Králové)
- MUDr. Květoslava Hamáková-Monitoring cardiovascular risks in patients with psoriasis (cooperation with the Institute
 of Preventive Medicine of Medical Faculty Hradec Králové)
- doc. MUDr. Jarmila Čelakovská, Ph.D., MUDr. Simona Vachatová, Ph.D, MUDr. Lenka Čáková Profiling DNA methylation changes and other biomarkers in patients with cutaneous melanoma. (collaboration with the Institute of Clinical Biochemistry and Diagnostics of Medical Faculty and Faculty Hospital Hradec Králové)
- doc. MUDr. Karel Ettler, CSc., MUDr. Veronika Wertzová Ph.D. Research and development of special textiles for protection in emergency and crisis situations "TexPrevent" - creation of textile garments for patients with atopic eczema (especially children).

Scientific research groups

- doc. MUDr. Jarmila Čelakovská, Ph.D. cooperates with the Institute of Clinical Immunology and Allergy of Medical Faculty and Faculty Hospital Hradec Králové (prof. Ctirad Andrýs, prof. Jan Krejsek, Mgr. Ing. Petra Boudková)
- doc. MUDr. Karel Ettler, CSc., MUDr. Veronika Wertzová, Mgr. Libuše Ježková. "Textiles in dermatology" cooperates with the Technical University in Liberec and VÚB (Institute of Cotton Research), a.s. in Ústí nad Orlicí.
- MUDr. Květoslava Hamáková, prof. MUDr. Lenka Borská, Ph.D., MUDr. Simona Vachatová, Ph.D. Monitoring cardiovascular risks in patients with psoriasis (collaboration with the Institute of Preventive Medicine of Medical Faculty Hradec Králové)
- doc. MUDr. Jarmila Čelakovská, Ph.D., MUDr. Lenka Čáková, MUDr. Simona Vachatová, Ph.D. Cooperation
 with the Institute of Clinical Biochemistry and Diagnostics of Medical Faculty and Faculty Hospital Hradec Králové
 (cooperation with PhDr. Petra Šauer Mikysková)

Equipment

- · Spectrophotometer in the UV and visible region
- Solar radiation simulator
- Phototherapy devices for local and whole-body treatment
- Equipment for the operating theatre: cryocutters, electrocautery, basic surgical equipment
- Handheld and digital dermatoscopes
- · Iontophoresis device
- · Devices for lymphology

Cooperation

- Technical University in Liberec, VÚB (Institute of Cotton Research) Ústí nad Orlicí, VÚB (Institute of Cotton Research)
 a. s. Ústí nad Labem-research team in TAČR (Technology Agency of Czech Republic) and in MPO (Ministry of Trade
 and Industry)
- Department of Dermatology and Venereology, Medical Faculty and Faculty Hospital in Plzeň: Jarmila Čelakovská, Komorousová Michaela, Cetkovská Petra, Novák Martin, Čermáková Eva, Bukač Josef, Andrýs Ctirad & Salavec Miloslav (2021) Dermatitis herpetiformis Duhring - evaluation of disease severity and tissue transglutaminase levels in 122 patients on dapsone therapy, Food and Agricultural Immunology, 32:1, 237-252, DOI: 10.1080/09540105.2021.1918067

International cooperation

- doc. MUDr. Jarmila Čelakovská-Observational study Globostad OBS15990
- Piergiacomo Calzavara-Pinton, Jarmila Čelakovská, Hilde Lapeere, Gregor Holzer, Mona Al-Ahmad, Chia-Yu Chu, Jiangming Wu, Marius Ardeleanu, Kwinten Bosman. Baseline demographics, comorbidities and disease burden in patients with atopic dermatitis: An update from the GLOBOSTAD observational study. Allergy. Volume 78, Page 136-136, Supplement 112, Special Issue, SI Meeting Abstract 000385.Published: 23 December 2023
- Calzavara-Pinton, P., Čelakovská, J., Lapeere, H. et al. Baseline Demographics, Comorbidities, Treatment Patterns and Burden of Atopic Dermatitis in Adults and Adolescents from the GLOBOSTAD Long-Term Observational Study. Adv Ther 40, 5366–5382 (2023). https://doi.org/10.1007/s12325-023-02644-5 Q2

- Piergiacomo Calzavara-Pinton, Jarmila Čelakovská, Hilde Lapeere, Gregor Holzer, Mona Al-Ahmad, Chia-Yu Chu, Jiangming Wu, Marius Ardeleanu, Kwinten Bosman. Baseline demographics and family disease history in patients with atopic dermatitis: an update from the GLOBOSTAD registry. British Journal of Dermatology, Volume 188, Issue Supplement 2, February 2023, Ijac140.028, https://doi.org/10.1093/bjd/ljac140.028
- Published: 25 January 2023
- Calzavara-Pinton, P (Calzavara-Pinton, Piergiacomo); Čelakovska, J (Celakovska, Jarmila); Lapeere, H (Iapeere, HilDe); Al-Ahmad, M (Al-Ahmad, Mona); Chu, CY (Chu, Chia-Yu); Wu, JM (Wu, Jiangming); Ardeleanu, M (Ardeleanu, Marius), Ozturk, ZE (Ozturk, Zafer E. Baseline patient demographics and comorbidities in patients with atopic dermatitis from the GLOBOSTAD registry. British Journal of Dermatology; 187, 3, E 110-111. Meeting abstract 224. Published 2022
- Calzavara-Pinton, P (Calzavara-Pinton, Piergiacomo); Celakovska, J (Celakovska, Jarmila) Lapeere, H (Lapeere, Hilde). Baseline patient demographics and comorbidities in patients with atopic dermatitis from the GLOBOSTAD registry. Journal of the American Academy of Dermatology, Volume 87, Issue 3, Page AB23-AB23, Supplement, S, Meeting Abstract 34329, Published SEP 2022, Indexed. 2023-02-09, Document Type, Meeting Abstract
- Calzavara-Pinton, P (Calzavara-Pinton, Piergiacomo); Celakovska, J (Celakovska, Jarmila) Lapeere, H (Lapeere, Hilde). Baseline Demographics and Comorbidities in Patients With Atopic Dermatitis: an Update From the GLOBOSTAD Registry. Journal of the American Academy of Dermatology, Volume 89, Issue 3, Page AB127-AB127, Supplement S, Meeting Abstract 42253
- Doc. Ettler Representation in international organizations that govern the field: the European Dermatology Forum (EDF), UEMS-EBDV (UEMS-European Committee for Dermatovenerology)