

Final Report

Project Title: Comparison of Patients with Mastocytosis in Two Populations: Predominance of Hymenoptera Allergy vs. Food Allergy.

Name, Country: Berta Mascaró Hereza, Spain

Type, duration, and location of Fellowship: Clinical fellowship, from March to May 2025, in Verona, Italy.

Host Institution and Supervisor name: Azienda Ospedaliera Integrata di Verona, Ospedale Borgo Roma. Elisa Olivieri and Patrizia Bonadonna.

Number of Patients Observed:

We had medical visits each day from 8:30 AM to 1 PM and then in the afternoon until 4 PM, with approximately 15-20 patients a day. The approximate number of patients visited was around 700 patients.

Tasks Developed and Activities Observed:

As part of the multidisciplinary team managing patients with systemic mastocytosis, I conducted comprehensive clinical histories and physical examinations. During the fellowship, I observed various procedures, including bone marrow biopsies and aspirates by the hematologist, skin biopsies for suspected cutaneous mastocytosis by the dermatologist, IV infusions for osteoporosis patients, and bone densitometries.

A significant focus was on diagnosing hymenoptera venom allergies. We utilized specific IgE tests, ImmunoCAP, and prick tests to accurately identify these allergies. We made treatment decisions and administered the corresponding venom immunotherapy vaccines daily, including initiating and maintaining immunotherapy. Additionally, we conducted initial consultations for patients with hymenoptera venom allergies and those suffering from urticaria.

We performed both prick and intradermal skin tests on patients who had experienced allergic reactions and carried out provocation challenges for food and drug allergies when appropriate.

Furthermore, I had the opportunity to participate in the Verona Allergy and Clinical Immunology Forum 2020, a highly engaging congress featuring Italian experts, which enriched my understanding and expertise in the field.

Clinical Settings:

I had the opportunity to work alongside a multidisciplinary team specializing in mastocytosis, including hematologists, dermatologists, and rheumatologists. This hands-on experience included conducting thorough patient assessments, interpreting diagnostic tests, and participating in the formulation of individualized treatment plans. I also observed and contributed to the follow-up care of these patients, emphasizing the importance of ongoing care and interdisciplinary communication.

I was also involved in clinical visits for urticaria, food and drug allergies, actively participating in settings where patients underwent drug or food challenges. These challenges are critical in diagnosing allergies and determining safe levels of exposure for patients. I learned about the meticulous preparation and careful monitoring required during these challenges.

Hours Spent per Week in Each Department

In the hematology department, I spend about 6 hours a week, and in the allergy department, about 26 hours a week.

Project Description:

The project focused on comparing patients with mastocytosis in two distinct populations: those with a predominance of Hymenoptera allergy and those with food allergy.

During my time in Verona, I had the opportunity to observe numerous patients with Hymenoptera allergy. This was a stark contrast to my home hospital, where the majority of patients present with food allergies. This experience was invaluable in helping me understand the unique profiles and clinical characteristics of these patients, which differ significantly from those I typically encounter. Recognizing these distinctive profiles is essential for accurately identifying and effectively managing these patients in the future.

This exposure has sparked a keen interest in fostering collaboration between our institutions to further investigate these differences. By comparing our observations and data, we can gain deeper insights into the varying clinical presentations and improve our diagnostic and treatment strategies.

Patients with systemic mastocytosis (SM) and Hymenoptera allergy (HVA) exhibit different clinical profiles compared to those with food allergies. Understanding these differences is crucial for developing tailored treatment plans and improving patient outcomes.

Collaborative efforts between our institutions could provide valuable insights and enhance

our understanding of these conditions, ultimately leading to better patient care and management.

Personal Reflection:

I would like to start by expressing my heartfelt gratitude for this incredible experience. I have learned so much from a fantastic team of professionals who welcomed me warmly and provided me with all the necessary tools to make the most out of this opportunity.

This experience has significantly enhanced my ability to identify patients more accurately, develop clinical judgment, and manage other clinical conditions that I had not previously encountered. Working alongside such a dedicated and knowledgeable team has been truly inspiring and has greatly contributed to my professional growth.

Furthermore, my experience during the rotation highlighted the importance of a multidisciplinary team in managing rare and complex pathologies like mastocytosis. Such conditions require a holistic approach that encompasses various medical specialties to ensure comprehensive and effective patient care. Working alongside hematologists, dermatologists, and rheumatologists, I observed how each specialist's perspective and expertise contribute to accurate diagnoses and tailored treatment plans. This collaborative environment enhances patient outcomes and fosters a deeper understanding of the disease from multiple angles, ultimately ensuring the best possible patient management.

Finally, the fact of being able to work in a different hospital from mine, learning from other professionals and observing different approaches to patient care has provided me with a broader understanding of medical practices. It has allowed me to compare various methodologies, gaining insights into innovative techniques and best practices that I can incorporate into my future practice, making me a better doctor. This experience has not only enriched my professional skills but also inspired me to continuously seek opportunities for growth and collaboration. I am motivated to apply the knowledge and skills I have acquired to improve patient care and contribute to the advancement of medical science.

Sincerely,

Berta Mascaró-Hereza