EAACI Clinical Fellowship

Final Report 2019

Name: Sofia Martins Farinha

Host institution: Unitat de Dessensibilizació a Quimioteràpics ICO-Bellvitge, Barcelona

Home Institution: Immunoallergology Department – Hospital de S. Bernardo, Centro Hospitalar de

Setúbal, Portugal

Duration of fellowship: 3 months; September – November 2019

Project title: "Developing skills in Drug Desensitization Protocols".

The EAACI Clinical Fellowship Program gave me the great opportunity to spend three months in the Desensitization Unit of ICO - Institut Català d'Oncologia, Bellvitge, Barcelona. The aim of my fellowship was to improve and increase my knowledge in the drug allergy field. My goal was to participate actively in the everyday clinical work and on different projects namely on the "Developing skills in Drug Desensitization Protocols" project.

This report will shortly describe the organization of my clinical fellowship and of all the activity performed during my stay in Bellvitge. I will explain how I achieved my initial defined goals and conclude with a brief reflection on the global experience of the fellowship.

The Catalan Institute of Oncology (ICO) is a public and monographic center of cancer and acts as a public company attached to the Catalan Health Service. It takes care of the disease in an integral way, since it gathers within the same organisation the prevention, the assistance, the specialized training and the research; and it is the leading center of these characteristics in the State. It is a public company created by the Department of Health of the Generalitat de Catalunya in 1995, and began operating in 1996 at the Duran i Reylans Hospital in l'Hospitalet de Llobregat (figure 1).



Figure 1 – Red mark: Duran i Reylans Hospital where is the Desensitization Unit; Green mark: Bellvitge Hospital where is located the Allergology Service

The clinical activity of Desensitization Unit is divided in three great domains – Consultation Office (where is made the consultations before initiating desensitization); Day Hospital Room (where is performed the drug-related skin tests); and Desensitization Room. From the beginning I was fully integrated into the unit's dynamic, being part of the medical team responsible for desensitization, which starts every day at 8 am.

Since this unit is very dedicated to drug desensitization, most of the days were occupied by performing desensitization to at least four patients per day. I was involved in all clinic activities including: attend medical consultations before desensitization (understand the type of reaction and the drug involved); preparation and performance of skin test (prick and intradermal); participate in the procedures for a desensitization; management of the reactions during desensitization; and contributed in patient's hospital discharge procedures.

The process of integrating a patient in desensitization at ICO worked as follows: normally the patient's oncologist or the nurse warns the Desensitization Unit in case of an allergic reaction to chemotherapy or other drugs. Then the Desensitization Unit call the patient for an appointment. On the day of the consultation skin tests were performed. In case of proven allergy, a bed was scheduled with the head nurse of the Day Hospital to performed desensitization posteriorly. Before starting any desensitization, it was always verified the cancer status, the type of reaction, the drugs involved in

the reaction, the drugs that were used to treat the reaction, other previous reactions that patients had, patient's medication and other essential points.

I had the great opportunity to attend the consultations and performed desensitization with doctor Jaume Marti Garrido and doctor Paula Vázquez Revuelta. I deepened my knowledge in the detailed collection of anamnesis and in the correct selection of the following test to perform.

At the beginning of every day the patients were discussed and the confirmation of the desensitization bags were made. Every day there were patients to desensitize. Several requests were made to the Desensitization Unit to make an appointment for new patients. On Monday's I attended to clinical sessions at Bellvitge Hospital (figure 1) from 08:00 to 09:00 am, where different topics of immunology and allergology were discussed and some important clinical cases presented. With a careful and practical look to every case, these meetings were great learning moments.

In total I spend at least 35 hours per week in Desensitization Unit, learning either from doctors and nurses. In this three months I had the opportunity to assist 76 desensitizations: 25 to oxaliplatin, 16 to carboplatin, seven to rituximab, six to paclitaxel, five to docetaxel, four to trastuzumab, three to pertuzmab, two to cisplatin, two to folinate and one to irinotecan and to pembrolizumab.

In case of doubt about drug allergy, oral provocation test was made. I had the opportunity to assist at three oral provocation test (oxaliplatin, tertuzumab and paclitaxel).

During my fellowship I was involved in the application of desensitization protocols knowing the importance of using two, three or four desensitization bags. It was also discussed the possibility of a new implementation of one bag desensitization, process that will start soon.

In addition to consultations, skin test and desensitization, the Unit received calls for all services of Duran i Reylans Hospital for any allergic reaction (pharmacological or not). In total I assist 12 request for help from other services, seeing a bit of everything from DRESS syndrome to cutaneous rash. In this sense, these assistances helped me to see more allergic pathologies, expanding my knowledge.

Furthermore, during my time in Bellvitge, I had the opportunity to participate in the "IV Matí Al.lèrgia Bellvitge: malatia respiratòria Al.lèrgica" (Hospital Universitari de Bellvitge – 2nd of October).

The EAACI Clinical Fellowship was an extremely valuable learning experience that with no doubt enriched my medical training.

I deepened my knowledge and improved my skills in drug desensitization. With the opportunity to desensitize 76 patients, I developed the capacity in analyzing drug allergy cases from a practical point of view. I was able to perfect and learn new techniques necessary in the allergy workup.

Working with this highly skilled team gave me also the possibility to acquire some knowledge regarding scientific writing, systematic revisions and statistical analysis. This motivating fellowship allied with the clinical challenge that I encountered in drug allergy allowed me to confirm my personal interest in this area.

Besides all the expertise related to allergology that I gained in this fellowship, the contact with a different hospital organization and a medical system of another country was also very enriching. With all of this I intend to share my recent knowledge in desensitization with my colleagues of Allergology Department in Portugal.

I must thank the medical team, Dr. Ramon Lleonart, Dr. Maria Teresa Dordal Culla, Dr. Jaume Marti Garrido, Dr. Paula Vázquez Revuelta and Dr. Valeria Herrera-Lasso, and the allergology nurses, that very kindly welcomed me. This team helped me to fully achieve my objectives and to turn this stay into a very rewarding professional and personal experience.

Sofia Farinha