Report on visiting Birmingham children's hospital

Cardiovascular Center, Showa University Northern Yokohama Hospital
Takanari Fujii

I am working for Showa University Northern Yokohama Hospital as a pediatric cardiologist. Most of my interests have focused on catheter intervention. I visited the Birmingham Children’s Hospital for eight weeks (from 11th of January to 3rd of March, 2016) as a candidate of the young investigator exchange program between AEPC and JSPCCS.

Birmingham Children’s Hospital is one of the largest centers of pediatric cardiology and they are very active in treatment of congenital heart diseases. I saw a lot of complicated cases such as hypoplastic left heart syndrome, heterotaxy syndrome and pulmonary atresia with major aortopulmonary collateral arteries. I stayed there as an observer in the cardiovascular unit and experienced many catheter interventions and cardiac open heart surgeries.

They start with ICU ward round at 8 AM every morning. They also hold a joint cardiac conference with pediatric cardiovascular surgery team twice a week. There are many additional lectures for young doctors with senior consultant cardiologists and surgeons about echocardiography, surgical technique and catheter intervention. They are all very attractive for me. One day I experienced the morphology teaching session on Tetralogy of Fallot presented by Professor RH Anderson on heart specimens.
I observed 3-4 cases of catheter intervention every day in the cath lab. Every staff in the hospital offered very good hospitality and enthusiastically guided me. Sometimes they teach the detailed technique of catheter intervention with hands-on support. Therefore I was able to have a wonderful time and get many useful experiences there and I got many new ideas and knowledge which I can use back home.

I also visit the Great Ormond Hospital in London in mid February following recommendation of Dr. Olivet Stumper’s. I attended the joint cardiac conference and observed some catheter intervention cases there. They had some different approach for management of congenital heart disease from Birmingham. That also very informative for me as well.

I got a great opportunity to make a case presentation at the Congenital Heart Intervention Group (CHIG) meeting in 28th and 29th January during my stay in Birmingham. Unlike many Japanese conferences, this meeting was all about discussing cases with complications and they also discussed their own experiences in honesty. I was very impressed by the setup and style of this meeting.

I had a wonderful time with the staff at the hospital. I really appreciated this fantastic opportunity.
I had an excellent time in Hôpital Necker Enfants Malades (Necker hospital). I stayed for six weeks there. Originally, I’m not a pediatrician, but an adult cardiologist. To be an expert of adult congenital heart disease (ACHD), I was training at Nagano Children’s Hospital (NCH). At the end of three-year training in NCH, fortunately, I got a chance to go to Paris as a member of the fellowship exchange program between AEPC and JSPCCS in 2016.

The most impressive thing was that I could see a lot of kinds and a number of patients in such a short period. Especially, I spent a lot of time to see cardiac surgery and cardiac catheterization. In Japan, most cardiologists (both pediatric and adult) are very busy in daily work, so they don’t have enough time to see a lot of cardiac surgery. Therefore this exchange program was a good opportunity to see many operations. They perform three or four cardiac surgery every weekday, much more than NCH. In regard to cardiac catheterization, percutaneous pulmonary valve implantation and percutaneous Potts shunts are performed, which are not yet available in Japan. These procedures were very exciting, and the interventional doctors in Necker hospital were very familiar with those. I believe that in the future these experiences would be useful when we start new interventions.

In addition, professor BONNET managed me to go to Hôpital Européen Georges-Pompidou once a week to learn ACHD treatment, which is twenty minutes away from Necker hospital by Metro. I talked a lot about ACHD with specialists there. That was also useful for me.

Before I left for Japan, I was so nervous about two points. One was French speaking because I couldn’t speak and listen to French at all. But all the medical staff was very kind to me, and they tried to translate French to English for me to understand well. When I met some staff in the hall, they always talked to me, “Ça vas, Manabu? (Are you fine?)”, or “Is everything doing well? Therefore I made friends with many French doctors.
Twice I was invited to their home party, had a nice fancy dinner, and had a wonderful time with them. Another thing I was concerned was the public safety. As you know, they had a horrible terrorism in November 2015. I saw a lot of police and armies with weapons all over the city. Because of that, I had no trouble when I stayed in Paris.

During my stay in Paris, I also enjoyed sightseeing. I visited many famous spots. When I talked about my sightseeing experience with local Parisien and Parisienne, they said that I already visited almost whole Paris, and could enjoy Paris enough!

The stay in Paris was quite meaningful for me. My last words at the staff meeting just before leaving Paris were as follows, “I love Paris, I love Necker, and I love you... I’ll never forget your kindness.”

Finally I really thank AEPC, JSPCCS, all the staff of Necker hospital, my colleagues in NCH, and my family to give me such an excellent time. I hope I’ll visit Hôpital Necker Enfants Malades and talk with my French friends someday.

Merci beaucoup ! A la prochaine fois. Bonne chance!

With Pr. Damien BONNET at the party

With the colleagues at the famous restaurant in Montparnasse
With Dr. Gitti MILANI in the cathe-lab
My short stay in Padova

Takahisa Sakurai, MD.
Chukyo Children’s Heart Center, Nagoya, Japan

It was a great four weeks for me to spend time with pediatric surgical team in Padova University Hospital. The chief of the department, Professor Giovanni Stellin, is very famous for annular preserved Fallot repair and Minimally invasive pediatric cardiac surgery. Unfortunately, I did not have chance to see Fallot repair, however I could see many minimally invasive procedures. Minimally invasive procedure was already a routine procedure in Padova. Until I see this procedure by myself, I could not believe that partial AVSD or subaortic resection had been undergone with small 4-5 cm lateral incision. Neck or peripheral cannulation were simply done as a daily procedure. This has changed my mind about minimally invasive procedure.

Case conference was very interesting to join. Although I could not understand the content of the discussion completely, due to language barrier, once the heated debated started, it sometime took about one hour to finish even only one patient. This was a culture shock for me.

The last week of my stay, I spent in cardiac morphology department, under the super vision of Professor Angelini. This department has long history and huge collections of cardiac morphology. Unfortunately, I did not have time to see all the morphology collections, but I did have chance to see some of interesting heart collections.

Life in Italy was also fantastic, Padova has famous churches and very close to Venice. Of course, I also enjoyed fabulous Italian food.

Because of Paris terror, I was little afraid to visit Europe, but Padova was very safe, and quiet beautiful city. One thing I really regret was that I did not have much time to study Italian language. If I could speak Italian, I could make my stay more fruitful. Of course, although I could not speak Italy, people in the hospital were very nice.
Finally, I do really appreciate to have such a wonderful opportunity staying in Padova. The member and executives of AEPC/JSPCCAS, Prof. Stellin, Dr Padallino, Prof. Angelini and Prof. Milanesi. Also I wish to acknowledge all the stuff in Chukyo Hospital to fill my vacancy.
I was able to visit Japan for a four-week fellowship thanks to the AEPC-JSPCCS exchange programme. After having been selected for the programme, I had the possibility to choose the time period for my stay, eventually accomplishing it in February 2016 in Nagano Children’s Hospital.

Under the lead of Dr Satoshi Yasukochi (the President of the JSPCCS) and with everyday support of Dr Kohta Takei, I started to participate in the centre’s activities. I was able to witness daily ICU and cardiology meetings, operations and catheter interventions, ECHO and fetal ECHO, outpatient clinic, or case conferences. I was accepted by all staff members in a friendly way and everyone was more than willing to answer my questions contrary to the language barrier.

There are many paediatric cardiology centres in Japan, unlike the Czech Republic, where we have a single centre for the whole country. Nagano Children’s Hospital is a smaller centre than our centre in Prague and performs more catheter than surgical interventions. Resulting from a lower number of operations, there is no cardiology ICU and the patients are admitted to a general paediatric ICU.

Although the treatment of patients with congenital heart disease in Japan is in many ways similar to Europe, there are also differences, of course. Let me point out a few.

In Japan, I noticed a tendency to perform more complex surgery later than in our centre. Many patients with complete AVSD undergo pulmonary artery banding as the first step to be able to put off the complete correction. Norwood operation is performed at the age of at least one month (patients are on PGE1 infusion until then) and sometimes also deferred by bilateral pulmonary artery banding. Patients after TOF repair or after TCPC are diagnostically catheterized routinely in Japan. I was also surprised by the unavailability of homografts in Japan, changing the spectrum of operations.

What is possibly unique in Nagano Children’s Hospital is a great emphasis on detailed ECHO examination. The ECHO centre has four high-end ECHO machines from four different manufacturers at its disposal and uses the specific advantages of each of them. Dr Yasukochi also includes all in-depth details like TDI or 3D ECHO in every patient’s routine ECHO examination to be able to use all available parameters for research later.

My main project during the stay was focused on evaluating the 3D strain of systemic right ventricle in HLHS patients compared to normal left ventricle. I learned how to collect 3D ECHO data and use a 3D speckle tracking software to obtain the strain
curves. The first results of this project proved to be very interesting and we plan to continue the collaboration with Dr Yasukochi.

There were a few events in the field of paediatric cardiology in Japan during my stay and thanks to Dr Yasukochi I was able to attend all of them. The first one was a meeting on paediatric pulmonary hypertension in Tokyo. I especially appreciated this one as pulmonary hypertension is one of my major interests and was the topic of my PhD thesis. Approaching the end of my stay, I also attended the 22nd Annual Meeting of Japanese Society of Fetal Cardiology meeting in Tokyo. This meeting was also very interesting and brought me many new insights into both prenatal screening and resulting postnatal care of patients with heart defects in Japan. Finally, I was also lucky to be able to see a part of winter ECHO seminar in Matsumoto on the day of my departure from Japan.

From the professional point of view, the fellowship meant invaluable experience for me. The chance to see the differences in the health system and the usual practice in Japan broadened my horizons. I also used the occasion of being in Japan to consult a case of Kawasaki disease with severe coronary arteries dilatation, which is very rarely seen in the Czech Republic. In return, I had a short presentation about the Czech Republic and our heart centre. During everyday work, I was able to learn many new skills both theoretically and practically. I particularly appreciate Dr Yasukochi's stimulating approach that forces you to think about your patients both in a deeper and broader perspective.

I was also lucky to get to know Japanese culture and to see a few other places in Japan, such as Nagano, Tokyo, Kyoto, or Mount Fuji. February isn’t perhaps the best time for travel and sightseeing, but I must say that I enjoyed Japan extremely. I also couldn’t miss the opportunity to taste various kinds of Japanese food.

On the whole, the stay in Japan was incredibly gainful for me both professionally and personally. As I consider this fellowship a great honour, I would like to thank both the AEPC and JSPCCS for the amazing opportunity. I strongly recommend applying for this programme to all AEPC junior members.

Karel Koubský, MD, PhD
Children’s Heart Centre
2nd Faculty of Medicine of Charles University and Motol University Hospital
Prague, Czech Republic
AEPC – JSPCCS exchange program from junior members; a report from my experience at the National Cerebral and Cardiovascular Center, Osaka, Japan.

I had the incredible privilege to receive a grant from AEPC and JSPCCS to participate in an exchange to the National Cerebral and Cardiovascular Center in Osaka, Japan. I would like to thank both associations and the amazing pediatric cardiology team especially the Director of the perinatal and pediatric cardiology division, Dr Isao Shiraishi, for their warm welcome.

My interest for Japan has been present since my young age. When I first heard of this grant, I was thrilled by the idea of visiting this fascinating country. And I knew that the unique opportunity of experimenting the practice of paediatric cardiology in Japan in such a close and direct manner would likely not reoccur in the future. My interest for Japan came also from my ongoing research collaboration with a Japanese colleague from Tokyo, Dr Ken Takayashi, whom I could meet in person.

I am a junior member of AEPC for the last 3 years and I have completed my pediatric cardiology training at Sainte-Justine’s Hospital in Montreal, Canada. I completed one year of fellowship in heart failure and transplantation and I am currently finishing a year of training in advanced echocardiography; both at Stollery Children’s Hospital in Edmonton, Canada. I will start shortly an additional year of fellowship in heart failure and transplantation at Stanford with a focus on mechanical ventricular assistance. My main interests include transplantation, heart failure, echocardiography and humanitarian projects in pediatric cardiology.

The National Cerebral and Cardiovascular is a dedicated institution for neurology and cardiology. It is one of the biggest pediatric and congenital cardiology centers in Japan and offer services to both adult and pediatric population. There are 12 pediatric cardiologists and all cardiology specialities: outpatient clinic, inpatient service, Cardiac PICU both medical and surgical, electrophysiology, cardiac catheterisation, heart failure and transplantation. There is a total of 81 beds for pediatric and congenital patients which include 63 on the ward, 6 NICU beds, 6 medical PICU and 6 surgical PICU beds.

I participated to their morning and evening rounds where interesting discussions around pediatric and adult congenital patients take place. I was exposed to a wide range of cases with a great variety of pathologies and complexity. The staff cardiologists are all very keen and teach a lot to the residents. I met a dynamic, competent group of residents of all levels; they are 15 in the program. I did assist to most clinical activities including outpatient clinics, rounds on the ward and PICU, cardiac catheterisation, echo lab and exercise lab activities.

I definitely appreciated and learned a lot during this exchange. I would like to share some of the many highlights of this experience. Mainly, I was touched by the physician’s kindness and extreme generosity towards to me that is also present towards their colleagues, nurses, residents, and patients. We had numerous discussions about the similarities and differences of our respective centers. I learned a lot by seeing their different approach on some lesions, but mainly by seeing and discussing adult congenital cases. Overall, the practices are very...
similar but it is interesting to simply discover a new way of functioning; and even getting ideas on how to improve our own functioning. I also appreciated that they had a well-organized long-term follow-up of a big cohort of Fontan patients with detailed hemodynamic and functional assessments.

Interestingly, there was also a recent pediatric heart transplant just before my arrival. That allowed us to discuss the challenges of transplant in Japan and some ethical aspects related to organ donation and the population’s beliefs. We discussed management and I presented on the rejection in transplantation during evening rounds to the cardiologists and residents. I had the chance to see one magnetocardiogram for the first time and to learn about its functioning.

Finally, discovering Japan before, during and after this exchange was a delight. On weekends, we visited Osaka and the surroundings including Kyoto, Nara and Kobe. I met friends from Osaka and also what I could call new friends. This opportunity was incredibly rewarding and I can’t wait to see them again in conferences and to collaborate on research projects or humanitarian missions.

Here are some pictures. The first on the left is with the incredible Dr Isao Shiraishi, the Director of the perinatal and pediatric cardiology Division at the National Cerebral and Cardiovascular Center. The second on the right is with Dr Hideo Ohuchi, a senior staff of both pediatric and adult congenital departments and with Dr. Aya Miyazaki, an EP cardiologist. On the bottom, are pictures with the group of cardiology residents at their annual event.

Best regards,

Dr. Nassiba Alami Laroussi