

Interview with Prof. Chi-Kong Li: recent advances in stem cell transplantation

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Editor's note

It is no surprise that many paediatricians report greater satisfaction than any other specialists. What is the magic in it? In this spotlight interview, we had the great honour to invite a well-experienced paediatrician—Prof. Chi-Kong Li, Department of Paediatrics, The Chinese University of Hong Kong, Prince of Wales Hospital, Hong Kong, to share his story of being a paediatrician, his view on medical systems in various regions, the advances in stem cell transplantation and so on (*Figure 1*).

The attraction of pediatrics

We believe doctors have their own stories of becoming a specialist in their field. What actually makes him interested in being a paediatrician and why paediatrics but not other medical disciplines?

"Why do I want to be a paediatrician? I think paediatrics is highly attractive to the people who are passionate about helping children. Most of the children can recover remarkably after appropriate treatment even though they are admitted to intensive care unit. Imagine if we can help these patients recover from their underlying illnesses, they will smile and say bye-bye to you when they are discharged. That is a kind of happiness which doctor will pursue and appreciate very much." said Prof. Li.

Healthcare systems in various regions

Prof. Li has obtained pediatric trainings in Hong Kong, the UK and US respectively. We are thus curious to know the differences in these regions. "In Hong Kong, basically the government public service provides medical treatment for all the major illnesses. Undoubtedly, patients can opt for a private medical service, however, this is only the minority. Over 90% of the hospital services are still provided and financially supported by the government. It is beneficial to the people suffering from serious illness as they can be cured with the help of the government



Figure 1 Prof. Chi-Kong Li (middle) and AME editors (left and right).

funding. In the UK, it is also a similar case. The National Health Service is also providing great support to citizens in the hospitals and the general clinics. While in the US, it tends to be a kind of a private-based health service system, people have to pay for their insurance before getting the medical service. For the underprivileged, they can still have the fundamental medical care provided by the government. Yet, the quality of the care can no longer be as good as those private hospitals." said Prof. Li.

The medical system in China nowadays

As a member of The Chinese Paediatric Association, Prof. Li has a close connection with hospitals in China. Therefore, it is a golden opportunity to know his view on the medical development in China. Nowadays, we can see the rapid development of the medical system, especially in the field of pediatric oncology. Prof. Li explained, "There are many new hospitals and wards have been built for the patients who need special care services, which is a significant progress in the number of stem cell transplant centers and stem cell transplantation. Not only the quantity but also the quality of patient care is much improved."



Figure 2 Interview with Prof. Chi-Kong Li: recent advances in stem cell transplantation (1).

Available online: http://www.asvide.com/article/view/24774

Keep conquering hurdles of stem cell transplantation

In the past, we have a difficulty in seeking donor who is compatible with the recipients for the transplant. However, in recent years, this "donor hurdle" can be overcome by the following methods.

Prof. Li explained, "Firstly, there is a markedly increase in the donor pool worldwide, including Hong Kong, European countries and even mainland China. There will be a much higher chance of identifying a compatible unrelated donor. On the other hand, the unrelated cord blood bank is also expanded rapidly. We can have a fast search for a compatible cord blood unit for patients requiring urgent transplant."

In the old days, we had a difficulty in performing successful haploidentical transplant due to the rejection of the donor stem cells or the severe graft-versus-host disease after successful engraftment of the donor stem cell.

Most recently, the haploidentical transplant is widely-applied among family members. In a family, either the father or mother should be compatible, also known as half-matched with this child. Therefore, theoretically, parents are all suitable as a haploidentical donor for a successful transplant.

We are now able to remove some of the reactive white cells in the donor stem cells by the stem cell manipulations. Hence, when we infuse these selected stem cells into the patients, there is a higher chance of getting engraftment. Furthermore, we can further manipulate haploidentical transplant by a post-transplant immune suppression to help overcome the problems I just mentioned.

With the advancement of technology, it is such a blessing to know a majority of people can now find a suitable donor for transplant.

To cure sometimes, to relieve often, to comfort always

As a pediatrician, Prof. Li has come across lots of children and worried parents. He fully understands the parents must be frustrated and depressed when they need to look after a child with serious illnesses. To our surprise, the childhood cancer treatment is now having a good result, at least 70–80% of the patients can survive after the appropriate treatment.

"Therefore, the medical team and I would try to showcase the positive prospect of the treatments to the parents. Moreover, we will try our best to help the patients and their family go through this difficult journey needs by listening to their worries and consoling them more." said Prof. Li.

Messages to the peers and readers

Prof. Li would like to round this exclusive interview off by delivering the following messages to his peers and readers. Firstly, to the peers, as the journal is newly-developed with a bright prospect for future. He would encourage his colleagues to submit their articles to better the journal step by step. For the readers, he thought they would be interested in it as there is a wide scope of topics. He said, "We are eager to have their feedback and their ideas to help better improve the journal." (Figure 2).

Expert's information

Chi-Kong Li, paediatrician and professor, currently serves as Professor, Department of Paediatrics, The Chinese University of Hong Kong, Prince of Wales Hospital, Hong Kong and the Director of Lady Pao Children's Cancer Centre, Prince of Wales Hospital. His main research focus is on childhood leukaemia, haematopoietic stem cell transplantation and thalassaemia. He had been Chief of Service of Department of Paediatrics, Prince of Wales Hospital for from 2004 to 2014. Dr Li has close collaboration with hospitals in China and is now the vice chairman of the Chinese Children Cancer Group, and also member of haematology section of The Chinese Paediatric Association. He has published over 300 peer-reviewed

papers, written chapters in 3 books and editor of one book. He is now an editorial board member of *Journal of Xiangya Medicine (JXYM)* as well.

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performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee(s) and with the Helsinki Declaration (as revised in 2013). Written informed consent was obtained from the patient for publication of this manuscript and any accompanying images.

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