Charles M. Balch: specializing surgeons is going to be a trend

Nancy Q. Zhong

Editorial Office, Chinese Clinical Oncology, China Corresponding to: Nancy Q. Zhong. Editorial Office, Chinese Clinical Oncology, China. Email: editor@thecco.net.



Submitted Oct 09, 2012. Accepted for publication Nov 02, 2012. DOI: 10.3978/j.issn.2304-3865.2012.11.02 Scan to your mobile device or view this article at: http://www.thecco.net/article/view/1190/1869

Introduction

Dr. Charles M. Balch, M.D., FACS, Professor of Surgery, University of Texas Southwestern Medical Center, was previously Deputy Director for Clinical Trials and Outcomes Research at Johns Hopkins Institute and Executive Vice President and Chief Executive Officer of American Society of Clinical Oncology (ASCO). He has led a distinguished career as a clinical and academic oncologist for the past 35 years, as a leading authority in both melanoma and breast cancer. He has also made significant contributions to laboratory research in tumor immunology and human T lymphocyte differentiation. He is author of over 700 publications, which have been cited over 20,000 times in the biomedical literature, and has lectured in over 35 different countries in the world and most of the major academic centers in the United States. Dr. Balch is the founding Editor-in-Chief of the Annals of Surgical Oncology, which is recognized as the leading journal in the world in its field. He also held major leadership roles involving clinical research in three comprehensive cancer centers (University of Alabama at Birmingham, University of Texas M D Anderson, and the City of Hope National Medical center). He has been a Principle Investigator or Co-PI of numerous clinical trials. His research interests include clinical trials, biological therapy for cancer, sentinel lymph nodes and cancer biomarkers, and melanoma and breast cancer.

In 2012 Chinese Society of Clinical Oncology (CSCO), Dr. Balch gave two lectures respectively on "The training and certification of surgical oncology in the United States of America" and "Lessons learn from 35 years of melanoma clinical research". After his lectures, Dr. Balch was interviewed by CCO Editor regarding the topic of specializing surgeons, achievements in melanoma agent



Figure 1 Dr. Balch was being interviewed by CCO editor during Chinese Society of Clinical Oncology (CSCO), September 2012

development, and challenge ahead of him in his medical research (*Figure 1*). At the end of the interview, as an authority in medical research publication, Dr. Balch encouraged Chinese researchers to be strong in scientific English since medical research in China is significant to medical research in the whole world.

Interview

CCO editor: It is our great honor to have you sharing with us the experience and information on the training and certification of surgical oncology in the USA. Many people think that it is a waste of resources by specializing or subspecializing surgeons. What would be your explanation? Does surgical specialization by training make a difference in outcome?

Dr. Balch: With the large amount of new information on cancer treatments for surgical patients (with new surgical technologies, new diagnostic tools and new drugs), surgeons in the United States and elsewhere have restricted

Zhong. specializing surgeons is going to be a trend

their practice to specific specialties (e.g., breast surgery, gastrointestinal surgery) and even sub-specialized (e.g., colorectal surgery) in order to keep up with the rapidly changing advances in the cancer field. And there is very good evidence, in the United States and in Europe, that the outcomes for many types of cancer are better when treated by specialists than non-specialists, both in terms of complication rates and survival rates. A good example would be in patients who have a major resection on their pancreas or their liver where the death rate after surgery with a complication is much higher among surgeons who do it infrequently or in hospitals that have a lower volume of that type of major surgery. It's not just about the skill of the surgeon; it's about the entire team that takes care of these seriously ill patients.

What our patients want is to get the best results, and with the least amount of complications or side effects. And clearly for advanced cancers, the best results are proven to occur when patients with complex or advanced cancers are taken care of in a specialty hospital or cancer center by a team of specialists (i.e. surgical, medical, radiation oncologists) who concentrate their time and efforts on one or a few types of cancer and, as a result, have a larger experience in getting patients safely through the proper treatment. So you can look at it this way. A bigger waste of health care resources would occur in those circumstances when a patient has the wrong therapy, a major complication, or a treatment-related death because they had a poor outcome. So for the more complex or advanced cancers, not getting experienced and specialty-based multimodality cancer care might be more expensive at the economic level and more tragic at a personal level, for those patients who don't get the proper treatment and a safe outcome.

CCO editor: Regarding melanoma, there were three new drugs proved by the FDA last year as we know. Are there any new progress going on this year?

Dr. Balch: Yes, it is an exciting time in melanoma care with new drugs because for about 25 years, no new drugs were approved for use in patients with metastatic melanoma. Last year (in 2011), 3 new drugs were approved, PEG-interferon, an adjuvant therapy for stage III melanoma; Ipilimumab, a first line therapy for stage IV melanoma; and Vemurafenib, as a first line targeted therapy for metastatic melanoma in those patients whose metastasis express the BRAF-mutation. An important aspect of this targeted therapy for BRAF mutant metastatic melanomas is that among fair-skinned melanoma patients (such as those in America, Europe and Australia), the majority of metastatic

melanomas are from sun-induced primary melanomas that have a higher expression of BRAF-mutation. In contrast, those with darker skin (such as those in Asia and Africa), often have a different form of melanoma that is not suninduced and whose metastases have a much lower frequency of BRAF-mutation. We still have a lot to learn about biomarkers that can be used to select targeted therapy for these melanomas that are not sun-induced. This is an area for a lot of important research is going on here in China.

This year at the ASCO meeting, results from melanoma clinical trials involving three additional drugs were presented, and it is likely that they will be approved for routine use: these are the dabrafenib, trametinib and anti-PD1. The first two drugs have efficacy in metastatic melanoma expressing the BRAF mutation, while the anti-PD1 results were from a promising Phase I study that showed substantial treatment responses even in these patients who had failed prior melanoma therapies. Now the next step is going to be the combinations of these drugs and then also test these drugs as adjuvant therapy in patients with stage III disease with the aim of increasing survival rates.

CCO editor: As a leading expert in melanoma and breast cancer in the world, what do you think is your main challenge over your decades of research?

Dr. Balch: There are two things.

One is to sustain and even increase the funding for clinical trials. In this era where so many new surgical devices, new diagnostic and radiological tests, and many new drugs are rapidly becoming available, we must be able to systematically test how to properly apply them in the correct combination and sequence based upon evidence from prospective clinical trials. Conducting these trials are expensive, but we cannot simply adopt new therapies without proving which patients benefit the most and to ensure that the benefits of these sophisticated and expensive new therapies outweigh the risks and side effects of the treatment. Our challenge is going to be how to integrate new therapies into our current therapies in a systematic way through clinical trials. One solution is to have international networks of physicians and medical centers who will collaborate together to complete these clinical trials more rapidly, including our colleagues here in China.

The second major challenge is how to provide the necessary education for all physicians about how to incorporate all these new advances into their practice so that all patients will benefit, not just those who make it to major medical or cancer centers in the larger cities. Worldwide,

Chinese Clinical Oncology, Vol 1, No 2 December 2012

there is a revolution of new information that is starting to get through because of collaborations with major cancer organizations, such as CSCO and ASCO, and through the internet. So education is going to be very important. It is going to be a lifelong need for all doctors who treat cancer patients. This means that having major medical conference, like this annual CSCO meeting, and the new cancer journal that is being launched... Chinese Clinical Oncology, which will be vital instruments for transferring information about cancer therapies to doctors throughout China and abroad.

CCO editor: As the Editor-in-Chief of Annals of Surgical Oncology, also considering your large amount of publications, what would be your advice for Chinese young doctors and medical students on designing a paper or a research?

Dr. Balch: There is very good cancer research coming from Chinese investigators, both clinicians and scientist. Indeed, for our journal, we are publishing many important articles from China. Part of the challenge for Chinese researchers, is being able to present their scientific and clinical work in fluent scientific English. It happens to often

Cite this article as: Zhong NQ. Charles M. Balch: specializing surgeons is going to be a trend. Chin Clin Oncol 2012;1(2):28. DOI: 10.3978/j.issn.2304-3865.2012.11.02

that we receive a manuscript with very important research and good scientific methodology, but is very poorly written. So one of my encouragements for young Chinese doctors is to work diligently at being fluent in communicating their research results in strong scientific English. It is not sufficient to just get a scientific article published, but the main messages and conclusions of the research must be written in good English so that those outside China can better read their articles and understand the significance of their research. One recommendation is to use editorial services that are available in China and elsewhere in the world prior to submitting an article for scientific peer review. In this way, physicians and scientist from all over the world will benefit from the science and research conducted here in China.

Acknowledgements

We acknowledge DXY.CN's authorization to publish the interview article.

Disclosure: The author declares no conflict of interest.