Dr. David T. Cooke: all for the patients

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Editor’s note

With this year’s theme, “The Joy and Privilege of a Surgical Career”, in mind, the American College of Surgeons (ACS) Clinical Congress of 2018 was held in Boston, USA, between the 21st and 25th of October. Bringing together multi-disciplined surgeons, surgery residents, medical students and highly experienced surgical teams from all over the world, this Congress sparked a whirlwind of ideas we believe can serve to benefit patients throughout the world.

Taking this opportunity, The Journal of Visualized Surgery (JOVS) is honored to interview Dr. David T. Cooke, from the University of California, and Davis Health System, who will share with us his insights concerning the diagnosis of cardiothoracic cancer, his patient-centered outcomes research, and his experience of being a cardiothoracic surgeon (Figure 1).

Dr. David T. Cooke, the vice-chair for the program committee of the 2018 ACS Clinical Congress, received a PhD from Harvard medical school in 1999 and is now a well-known specialist in cardiothoracic surgery. Dr. Cooke’s academic and professional endeavors include oncologic trials, surgical outcomes/health services research, patient-centered outcomes research, translational research, surgical education and work in medical social media. Dr. Cooke has authored over 50 scholarly manuscripts and textbook chapters. In the research field of Cardiac and Thoracic Surgery, he was honored with the Castle Connolly Top Doctor award in America in 2015, and has also published a number of papers in the field.

Interview

JOVS: As the vice-chair of the 2018 ACS Clinical Congress, what do you expect most from this conference?

Dr. Cooke: I am honored to serve as a vice Chair for the program committee of the American College of Surgeons Clinical Congress, which is the largest surgical meeting in the United States, and is one of the largest surgical meetings in the world. It’s a great opportunity, because it brings together surgeons from all different specialties. I’m a cardiothoracic surgeon and I specialize in lung surgery. On my way here, I had a nice conversation with a colleague who’s a trauma surgeon. So, I get a chance to exchange ideas with other surgeons in different specialties from all around the world. And that’s a wonderful opportunity provided by the clinical congress.

JOVS: How is the current clinical situation of applying biomarkers to diagnose cardiothoracic cancer in the USA?

Dr. Cooke: Currently, for the management of thoracic oncology, whether it’s lung cancer or other types of oncology, it’s really about looking at precision medicine and molecular medicine. We talk about tumors not just in a traditional stage manner, like stage 1, 2 and 3, but we also look at the molecular makers for that tumor. Patients benefit from treatments like cardiothoracic inhibitors, or chemotherapy which are either as part of conventional treatments, or as part of clinical trials. So, molecular medicine and precision medicine really are the keys to care for thoracic oncology patients. And really, every thoracic surgeon or lung cancer surgeon or esophageal cancer surgeon should be well-versed in molecular medicine and precision medicine.

JOVS: What are the advantages of biomarkers in the diagnosis of cardiothoracic cancer compared to traditional imaging?

Dr. Cooke: Right now, we are looking at research like
liquid biopsy taking the circulating DNA or other molecular elements in one's blood that will help make diagnosis for tumors. We have made great steps in taking radiology to the next level by looking for cardiothoracic nodules for lung cancer on CT. We are also interested in artificial intelligence machine learning. Though all these things are not ready for standard care, I suspect they will be important moving forward.

**JOVS: As we know you have recently focused on patient-centered outcomes research, could you please share with us your latest findings? How do you use these outcomes to evaluate health service?**

**Dr. Cooke:** My research is about patient-centered outcomes research, patient engagement and patient activation. In other words, we are empowering patients to play an active role in their own care. It's not anything you will find in the primary care community. We have patients who for many years we keep screening for disease prevention. In terms of surgery, we want patients to really focus on methodology and things to maximize the outcomes, which is the most important thing to them. Also, we use social media to educate patients, e.g., some accounts in twitter or lung cancer social media, which have a great impact on the patients and the public. Utilizing approaches to manage pain after surgery is also actually what we are doing, based on the patient-center outcome research.

**JOVS: Do you think the physician extenders in academic surgery should be an integrated partner or a parallel player?**

**Dr. Cooke:** The role of physician extenders is a good question. In the United States, someone like a physician assistant who has a degree called PAC, or nurse practitioner, who has a degree called NP serves as the physician extender. I think they are extremely vital to the comprehensive care of cardiothoracic patients. They work closely with staff, trainees, and future cardiothoracic surgeons. They play an important part in the care of the patients and their loved ones as physician extenders, coordinators, as well as navigators in the process.

**JOVS: As the Castle Connolly Top Doctor in America, could you please share with us your story behind this success?**

**Dr. Cooke:** As a physician, I don’t look for awards but I’m very grateful for the awards that I do receive. These awards really symbolize the best practices in care which we provide for our patients. We are very proud of the outcomes of the patients with lung cancer or esophageal cancer. What we should do is to consider comprehensive approaches, to listen, and to understand what our patients like, and what they want. This will bring the best outcomes.

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**Footnote**

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

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