Cover Essay

The Art of Medicine

In medicine, drawings and other forms of illustration have played an important role in education and in communicating various aspects of our profession to others. Medical illustration, for example, has served to convey the anatomy of the human body in both its natural and diseased states, to document the principles of physiology, cellular and molecular biology, and even to record the proper sequence of tasks involved in accomplishing surgical procedures. Painters have recorded the accomplishments of physicians and other health care professionals who have contributed to medicine one way or another. In many cases, these images have been created to honor contributions and to provide us a glimpse of the personalities of the individuals whom we might otherwise not come to know. Artists have also created romantic and dramatic visions of medicine by painting scenes of physicians in operating theaters, investigators at the laboratory bench, and concerned physicians at the bedsides of their patients. Thus, artistic expression has not only served as a means of documenting the facts of medicine, but also as a way of depicting the very nebulous "art of medicine."

In my time as a physician, now just over a quarter of a century, I have come to recognize the art of medicine as the compassionate caring for others, who happen to be known to us as "patients," with empathy and an understanding of the human condition in both sickness and in health. Medicine is clearly an ever and rapidly changing applied science. As a young physician, I was trained to incorporate the "science" of medicine or, as it is called, "evidenced-based medicine" with the goal of achieving the best "outcomes" which are, oftentimes, ill-defined or, frankly, undefined. What is normal? What does disease-free survival really imply? What is "quality of life?" It didn't take long for me to realize that there was more to it than the "science" of medicine. Patients didn't often "fit" the textbook descriptions of diseases. Not all patients with the same disease responded in the same manner to the same treatments. I recognized that, though a collection of patients with acromegaly, for example, all have growth hormone-producing pituitary adenomas, no two of them have the same illness. Not only are their tumors different in size and invasiveness and their ability to synthesize and secrete growth hormone, but also each patient has varying tissue sensitivities to GH and IGF-1 leading to different expressions of the disease even when hormone levels are similarly elevated. Furthermore, I have also learned that the "illness" results from the impact of the disease state on the many different facets of the personal lives of affected patients, their coping skills, desires, attitudes towards health, etc. The "art of medicine," I believe, takes into account these and other variables and applies the "science" of medicine to establish a dynamic doctor-patient relationship within which there can be a creative interactive approach to all components of the work at hand including a sharing of information, diagnosis, education, medical decision-making, treatment, follow-up, etc.

I believe the art of medicine, as illustrated by senior experienced physicians and other health care providers, can and should become an example to young physicians. In contrast to the science of medicine, I am not sure that the art of medicine represents something that can be taught. I might be able to teach trainees to follow a published algorithm to manage patients with acromegaly, but they will understand very little regarding the complexities of the disease process, the illnesses manifest, and the caveats of medical decision-making without developing their skills as practitioners of the art of medicine. As is the case with other creative or engaging endeavors, the true art of medicine, in its purest form, can only be developed by active participation in the practice of medicine. This process requires seeing a lot of patients over a number of years, paying attention, building an interactive

Lewis S. Blevins Jr, MD

Departments of Neurological Surgery and Medicine University of California at San Francisco San Francisco, California E-mail: BlevinsL@neurosurg.ucsf.edu and observational database of sorts, all the while keeping abreast of and applying the science of medicine, and delivering patient care by actually caring for patients as people.

I took to drawing at a very early age. I combined my interests in art and medicine by age 7 or 8 years at the time I decided that I might wish to become a doctor. My pediatrician saw something unique in me and captivated my interest in medicine. I enjoyed visits to his office, often feigning sickness to secure a visit, as he would allow me to listen to my own heart and lungs, invariably show me a skull in his bookcase or radiographs that were on file, blood slides under the microscope, and he would occasionally lend me his medical textbooks. I would take them home and draw from them knowing that I had to return them but I desperately wanted to retain the images of some of the most amazing things I'd seen. When I was 10 years of age, my parents gifted me a copy of Gray's Anatomy, the hardbound edition that I ultimately used in medical school, and I started meticulously recording and reproducing the images, as it was a way to learn anatomy. I would spend hours in the local public library where I would sit in the reference section and redraw images from Cunningham's Textbook of Anatomy and Grant's Atlas of Anatomy. I worked in a morgue performing autopsies through college and medical school. By that time, I had a reasonable visual memory for things seen and did not draw from my experiences, and regret that I did not as there were plenty of fascinating things to have recorded. Parenthetically, as a result of my work in the morgue, I'm probably the only pituitary endocrinologist who can claim to have performed about 350 hypophysectomies... and removed about the same number of brains for examination.

My development as a painter started with paint-by-number sets in childhood. I started painting, oil on canvas and linens, in about 2002 in order to create original art, as I felt a need to enable my creative spirit to soar in the face of the demanding work as a physician. I have, largely, been a self-taught painter with exception that I have studied portraiture under renowned portrait artist Michael Shane Neal. I have learned a lot by studying the works of great painters in museums and books. My greatest influences are John Singer Sargent, Joaquin Sorolla, Anders Zorn, James Humbert Craig, some of the French impressionists, and various post-impressionistic Italian painters. I am a representational painter who mostly accomplishes landscapes and figurative works. Of late, however, I have chosen to paint scenes from our profession. I wish to share my emotional responses to the work we do for living, to illustrate the skill sets and personalities of those physicians I admire and respect, and to capture the mystique of "the surgeon" in the operating room or physicians elsewhere to share with others what only a few privileged may see. It has been both an honor and a pleasure to paint depicting great men and women who practice the art of medicine.

Treks to the neurosurgical operating room with a camera in order to obtain source material for paintings has served to remind me of the immense trust that patients place in us physicians and the confidence they have in our work. Interacting with my colleagues in this manner has provided a new dimension to my professional experience, as I am no longer limited to the outpatient clinics where I practice. In addition to allowing me the opportunity to be creative in a unique way, painting the art of medicine has, in many ways, facilitated or further developed my very own approach to the practice of the art of medicine. I have also come to recognize that the process of painting the art of medicine is very similar to that of employing the art of medicine to deliver patient care. Both of these endeavors involve education, mentorship, application of science, development of techniques, and they demand countless hours of active participation and thought to excel.

Where does art come from? It comes from light. Light illuminates. It defines color and reveals form. It, thus, demonstrates an aesthetic that represents a complex internal system of likes that lead to preferences leading to a particular style. I challenge you to find a source of light, or enlightenment, in your practices so that you may become creative and develop your own style of practice of the art of medicine.