A 30 Year Perspective on Hematology

Guest Expert:
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Welcome to Yale Cancer Center Answers with Drs. Ed Chu and Ken Miller. I am Bruce Barber. Dr. Chu is Deputy Director and Chief of Medical Oncology at Yale Cancer Center and Dr. Miller is an oncologist specializing in pain and palliative care. If you would like to join the discussion you can contact the doctors directly at canceranswers@yale.edu or 1-888-234-4YCC. This evening Dr. Miller is joined by Dr. Thomas Duffy. Dr. Duffy is Professor of Internal Medicine and Hematology and Interim Section Chief of Hematology at Yale School of Medicine.

Miller  Tom, thanks for joining us.

Duffy  Thanks very much.

Miller  I have to make a little admission here, 20 years ago I was a house officer here and was thinking a lot about what I was going to do with my career. There were a few people who were role models that helped me decide to go into hematology and oncology, and you were one of them, so I want to thank you.

Duffy  That is very lovely and kind of you.

Miller  It is a great opportunity to have you on the show and talk about your incredible career that you have. Can you tell us a little bit about your own journey through medicine?

Duffy  Sure. I was very fortunate having gone to Hopkins Medical School. I went there in the late 50s, early 60s, and then did my house staff training in internal medicine, on the Osler’s Service, and hematology. My mentor at that time was one of the greats of American Hematology, C. Lockard Conley. I finished my training there and then was on the faculty for a few years before coming to Yale. I came to Yale at the invitation of the relatively new chief of medicine at that time, the dynamic Sam Their, and joined one of the world's leaders in molecular hematology, Bernie Forget, in the division of hematology at Yale. I have been at Yale now since 1976. It has been a long period of time and a wonderful period of time. My career in some ways is a more modern career in hematology as well as in internal medicine or in medicine. Prior to this latter portion, individuals chose a single pathway in medicine and stayed in that particular arena for the rest of their lives. It has always been my contention that the attractiveness of a career in medicine is that there is such a breadth to what one is able to explore.

Miller  Let me delve a little deeper into that. In many ways, doctors have become more and more sub-specialized. For example, if someone does internal medicine, then they do hematology and they might do certain types of leukemia. I get the sense that you can actually explore different parts of medicine, is that what you mean?

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Duffy  What I mean by that is that I started off with my major focus in internal medicine and it has always remained my major focus. It is my belief that the care of patients in sub-specialized realms is often times as important a component to success in that therapy as attention to details that are the foundation of their management, rather than the imposed super-specialized attention to those details. I always instruct house staff that on the leukemia floor, yes there are realms that the hematologist must focus upon, but what makes a very important difference in the outcome of a seriously ill patient is the general medical attention. That medical attention is a combination of both the physician as well as the nursing staff. You know as well as I do that what happens on our oncology and leukemia floors, hematology malignancies, that nurses play a dramatic role in the day-to-day care, not only of the physical well being, but of the emotional and mental well being as well.

Miller  On that issue of physical and emotional well being, for patients who are very ill and are hospitalized, let's say with leukemia, we have gotten so technologically oriented with computers and test results, are we doing as good a job as was done 20 years ago in terms of emotionally caring for the patients?

Duffy  I think we are doing a better job, we are aware of it, I do not know that we necessarily participate in it. I have been in receipt of what I now recognize as a truly important opportunity for me, and I would hope for an audience as well. About 2 years ago, I was part of a team that was taking care of a lovely individual who was suffering with acute leukemia. He was admitted to the Yale-New Haven Hospital for induction chemotherapy, the rigors of which I think you recognize and have participated in. Unknown to me, during this 37-day hospitalization, the patient had secretly brought a mirror into the hospital and was sketching himself on almost a daily basis. He is not an artist professionally, although he is a furniture designer. At the end of what was a successful induction, he sent me a CD containing all of these charcoal portraits. These portraits are unique in so far as I know of no other trove of such material and they are remarkable. He was able to capture the innumerable different emotions and fears, but there is also a documentation of what we do to our patients physically. There is literally a diminishment of this man physically as he moves through the prolonged hospitalizations. Looking at those portraits, I went back in order to parallel the portraits with what was going on. In reading the charts I noted the obsession with which all of us documented the numbers and the complications, but there is virtually nothing that addresses where the patient is emotionally in relation to his illness. This is not to say the doctors were not addressing it, but it does give a very strong indication of what our priorities are, and one could argue that those are the necessary priorities, but it is dramatic how much these portraits have meant to me. It is easy to have this dual focus, but one aspect of the focus can overshadow the other.

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Miller It sounds like this will make for a wonderful meeting hopefully attended by doctors, house staff and young doctors as well. As you look back on the notes that you wrote in the house staff role and at the pictures which obviously are very soulful, what would you recommend to your house staff caring for a patient who is admitted with leukemia, anything different?

Duffy Part of one's role as an attending on a floor is that one has a wonderful opportunity, an opportunity that most of us do not seize upon, but I believe that you are in a more organized fashion. My belief is that the impact may be stronger if one integrates those discussions into the daily encounters that we have with our house staff, students, etc. The amount of medical information and the amount of science that needs to be covered leaves very little opportunity for a discussion that is textured in relation to all of this. A lovely house officer and I at Yale, Dr. Kirkpatrick who is now in Wisconsin, put together a paper that was published around 2 years ago called *Well Rounded*. It was an attempt to introduce how one could work this into daily rounds and those hurried encounters with patient. We move as rapidly as possible in order to cover the large number of patients and major problems that have occurred in the last 24 hours, which need to be addressed and corrected within the next 24 hours. One could say that attention to the details of a patients life is often times omitted because of this. This paper was an attempt at addressing how, in the course of those encounters, there are still many opportunities to address concerns of the patient. The attending should assume, what I think is a proper responsibility, of establishing the tone that brings into consciousness the need to consider, integrate and help resolve issues to support the patient as they go through the rigors of chemotherapy.

Miller I am personally impressed with the number of medical students here at Yale, and the emphasis they put on dealing with the psychosocial and emotional issues of patients. It is more than I saw when I was in medical school a long time ago. We all deal with our own issues as they come up, and we are reminded when a family member is ill that all of our patients were well, and then all of a sudden life changed. We're all very much alike, our patients and us.

Duffy I agree with you. Yale medical students are very fortunate. The whole curriculum has been dramatically altered and is certainly different from the curriculum in which I was trained. A significant amount of time is devoted to the psychosocial aspect of their patients' lives. There are even courses that address the spiritual aspects of patient’s lives. There is a student generated class, although I must give credit to one of the members of the faculty Dr. Fortune, that is a course strictly related to those other dimensions of illness that have been classically omitted from the medical curriculum.

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We would like to remind our listening audience to e-mail your questions or thoughts to canceranswers@yale.edu. We are going to take a short break for a medical minute. Please stay tuned to learn more from Dr. Thomas Duffy, Professor of Internal Medicine and Hematology at the Yale School of Medicine.

Medical Minute

Breast cancer is the second most common cancer in women. About 3000 women in Connecticut will be diagnosed with breast cancer this year. By earlier detection, noninvasive treatments and new therapies are providing more options for breast cancer patients and more women are able to live with breast cancer then ever before. Beginning at age 40 every woman should schedule an annual mammogram. You should start even sooner if you have risks factors associated with breast cancer. Screening, early detection, and a healthy lifestyle are the most important factors in defeating breast cancer. Clinical trials are currently underway at federally designated Comprehensive Cancer Center such as the Yale Cancer Center to make new treatments not yet approved by the Food and Drug Administration available to patients. This has been a medical minute and you will find more information at yalecancercenter.org. You are listening to the WNPR health forum from Connecticut public radio.

Welcome back to Yale Cancer Center Answers. This is Dr. Ken Miller and I am here with Dr. Tom Duffy, Professor of Hematology and Internal Medicine at Yale, talking about trends in oncology and patient care. Tom, I have enjoyed at conferences, you're sharing of stories, saying "I had a patient 15 years ago…," Let's do a little bit of that. Lets talk about, for example, leukemia, chronic myelogenous leukemia; any memories of patients who were a victory or a non-victory, things you remember?

Chronic myelogenous leukemia represents one of those almost luminous moments when treatment is successful in oncology and hematology. I'm put in mind of chronic myelogenous leukemia, which interestingly enough one of my medical school colleagues died with early on in his career, because there was no cure for it. The care of chronic myelogenous leukemia, prior to the recent molecular solutions to the disorder, was exemplified in a young woman who developed chronic myelogenous leukemia during the latter portion of her pregnancy. It is not a leukemia that kills immediately and the chronic phase of the disease could be handled symptomatically. She gave birth to a child with no problems. We were able to subdue the advancement of the disorder simply by reducing the white cell count but not eliminating the real pathology. But at that time, patients were faced with a true dilemma, a tragic choice that needed to be made. Bone marrow transplantation had come in as a possible solution cure for the disorder; however, she was the mother of a young child and needed to make a choice. Did she choose to save her own life by undergoing the bone marrow transplant, which at that time still carried with it a 40% chance of death, or did
she await what was a symptomatically controlled disorder that would evolve into a more aggressive acute leukemia, which we were unable to cure. This woman chose to undergo a transplant at that time and died in the course of the transplantation; certainly a tragic outcome. Chronic myelogenous leukemia is a real testimony to how successive generations of physicians and scientists build on the shoulders of previous generations. We now have an identification of the molecular abnormality and lo and behold we have a designer drug that we can administer to our patients. Chronic myelogenous leukemia may well be a disease which can now be cured with the ingestion of an oral drug, not the administration of the ablating chemotherapies that we formerly used for the treatment of chronic myelogenous leukemia. For individuals who are in the field of hematology and oncology, the perspective of what is to occur is really so extraordinary. It offers our patients literally a transformation.

Miller  Someone now with chronic myelogenous leukemia would be treated with this pill?

Duffy  Exactly, and we have innumerable patients who are being treated with pills. Of course they are not necessarily all cured, but a significant number are at least without evidence of that molecular abnormality and are remaining free of that abnormality for a prolonged period of time.

Miller  Let’s talk about a different leukemia. Someone with CML, you would put on a pill, but there are other diseases and sometimes we just watch people. If a patient came to you with chronic lymphocytic leukemia, what’s involved in that, in that first meeting with someone who has this disease, would you perhaps tell them you are going to watch it?

Duffy  Chronic lymphocytic leukemia is really a fascinating disorder. Chronic lymphocytic leukemia is the disorder where therapeutic intervention may well not be indicated. In fact, there is excellent evidence that patients' with chronic lymphocytic leukemia at certain stages will live out a normal life span. Chronic lymphocytic leukemia, or CLL, is a disorder mainly of the elderly. So decisions regarding how it is to be managed need to be adjusted to the age group in which it occurs. Chronic lymphocytic leukemia, when it rarely occurs in the 40 or 50-year-olds, obviously there will be some truncation of their life, and the question is how aggressive are you upfront in order to guarantee that they will not have an abbreviated life span. This is a circumstance where all of the new discoveries and prognostic features in CLL are helping immeasurably. Although, I don’t know as a practicing hematologist that it has made a dramatic difference. This is one of those disorders in which the initial observations aligned with the most modern molecular findings don’t really change dramatically what my recommendations are for the management of the disorder. That is to say that there are some disorders where one wants to get observations over a period of
time. Chronic lymphocytic leukemia is not a disorder which kills on Saturday. It plays out over a course of many years if not several decades. I have patients with chronic lymphocytic leukemia whom I initially started taking care of 30 years ago and now, 30 years later, their picture is unchanged. That is not to say that I have not had patients with chronic lymphocytic leukemia who have died in the course of only a few years, so the responsibility of the physician is to correctly characterize the disorder. A simple characterization is almost simplistic. One simply watches the number of leukemic cells that are present and we use a simple gauge. If you double the number of leukemic cells in the course of 12 months, it is a no-brainer to say that this disease is moving more rapidly than most patients who maintain a stable number of cells. The other question is that there are now many more options for treatment and the major dilemma is how much therapy upfront should be used with the trade off of complications versus the policy of watchful waiting.

Miller As a practicing hematologist how often do you use your gut feeling?

Duffy I guess the answer to that will be dependent upon what constitutes one’s gut feeling. What many people would believe is one’s gut feeling is basically what is generated from one’s experience. I might question what it is that I offer in the modern era after a long career in hematology. What I would say is that I actually possess a great advantage as do other physicians who have spent several decades taking care of patients. We have seen the course of the disease as it plays out in a patient's life. One of my discussions with the house staff and medical students is that they are disadvantaged in a certain way, yes they may know how the disease presents, but most don’t have an understanding of how that illness will play out over the course of a few weeks, a few months or even a year. I used for one of my discussions in a clinical ethics seminar the course of a patient whom I took care of with an illness that I knew from the outset would likely have an ending within a year to a year and a half. Having that knowledge allows one to actually orchestrate what is going to occur, anticipate what the problems are and address them. That gut involvement is actually based upon what I have known to be the natural history of disease. There is another very important aspect to this and that is in the whole realm of issues at the end of life and knowing how a disease evolves. An individual at the height of the illness and suffering might ask for the end, but if one can say to them that they don’t need to worry, this suffering will end and you will have a good quality of life thereafter, that’s an invaluable input to patients who are suffering with serious illness. The converse is also just as important, witnessing somebody at that height of suffering and knowing that it is only the prelude to further suffering, and counseling them that perhaps it’s time for all of us to recognize that we are prolonging suffering rather than prolonging life.

Miller These are very hard topics for all of us as clinician’s. You are a master at
working with patients honestly and being a role model, but how have you gotten better with time in helping people through these crises?

Duffy

I would say that I am unquestionably better for it, myself. There have been innumerable studies that demonstrate and document that many individuals are unhappy with their health care at the end of life, with the failure to address pain adequately, and we are doing a better job now, but we have a long road to go. The other aspect of that is the failure to communicate adequately with patients and carry out what it is that they desire from us. I currently head an end of life working group at the Bioethics Consortium that is looking at those particular issues. What I have come to understand in my own self is that physicians need to recognize that no one confronts death or dies with ease. In fact, I would take it a step further and say that we need to address not only the conscious problems, but also try and unravel some of the unconscious dimensions to this problem. Paul Berg, a professor at the Law School, has written a book that addresses the problem and takes it into the realm that death for all us is a taboo of sorts and in failing to acknowledge the hugeness of that challenge, we do not do for our patients what it is that we could achieve.

Miller

It is very thought provoking and needs to be talked about more.

Duffy

I would love to.

Miller

I hope you will come back. I would like to thank Dr. Tom Duffy for joining us on Yale Cancer Center Answers. It has been a terrific and very enlightening discussion as always. From the Yale Cancer Center, I would like to wish all of you a safe and healthy week.

If you have questions, comments, or would like to subscribe to our podcast, you can go to yalecancercenter.org where you will also find transcripts of past broadcasts in written form. Next week, we will meet Dr. Evelyn Shatil who will discuss the memory loss that is sometimes associated with cancer treatment.