

Healthline with Yale Cancer Center

Hosts

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WTIC Newstalk 1080

Colon Cancer Awareness Month Update

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*Healthline with Yale Cancer Center is a weekly broadcast on WTIC Newstalk 1080
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This is Healthline, a joint venture of WTIC NewsTalk 1080 and Yale Cancer Center. Yale Cancer Center is a resource for cancer programs throughout Connecticut, developing new advances in prevention, screening, diagnosis, and treatment. On Healthline, you will hear from some of the leading doctors in the country. Healthline is not intended to provide medical advice. Yale Cancer Center urges you to consult with a qualified physician in your community for diagnosis and for answers to your medical questions. And now, our co-hosts, oncologists Ken Miller and Ed Chu.

- Miller Good morning and welcome to Healthline. My name is Dr. Ken Miller and I am the Director of the Survivorship Program at the Yale Cancer Center in New Haven. I am here in the WTIC studios today with my colleague and co-host Dr. Ed Chu, who is the Chief Adult Oncologist at the Yale Cancer Center. Good morning Ed.
- Chu Good morning Ken. Healthline, with the Yale Cancer Center, is our way of providing you with the most up-to-date information on cancer care every Sunday morning at 8:30 a.m. Healthline features some of the nation's leading oncologists and cancer specialists who are in the forefront of the battle to fight cancer right here in Connecticut. Each week, Ed and I are joined by a different expert from the Yale Cancer Center. Our goal is to give you help by sharing the latest information about various types of cancer, and also to give you hope, because there is a lot of hope in the battle against cancer. If you would like to submit a question about cancer to Healthline, you can e-mail us at Healthline@yale.edu or call us at 1-888-234-4YCC. If you would like to listen to past editions of Healthline, or if you would like to learn about more about a specific kind of cancer, all of our shows are now available on the Yale Cancer Center website at www.yalecancercenter.org. Today, Ed and I are going to be discussing the detection and treatment of colorectal cancer in recognition that March is Colorectal Cancer Awareness Month. In addition to being the Chief of Medical Oncology at Yale, Ed is the Deputy Director of Clinical Research and the Co-Director of Developmental Therapeutics. He is also a national expert on the treatment of colorectal cancer. Ed, it is a great opportunity to have you here to talk about this today.
- Chu It is a pleasure to be here on the other side of the microphone to talk about colon cancer. As you said, March is Colorectal Cancer Awareness Month, and we really want to get the word out to the public about the importance of screening, early detection, and prevention.
- Miller Let me start by asking what colon cancer is.
- Chu Colon cancer is a cancer that arises in the lower part of the gastrointestinal tract, or the large bowel. It also involves the very lowest part of the large bowel, which is called the rectum.
- Miller One of the things that people think about immediately is; why does this happen? Do we know what causes colon cancer or have any clues?

- Chu We certainly have a better understanding of the biology of colon cancer. We know that colon cancer arises from polyps and generally it takes about 10 to 12 years for those polyps to turn into cancer. We are still trying to figure out what causes that transformation from a benign polyp to a colon cancer, but we do know that there are a number of mutations in key genes that can lead to colon cancer. We also know that there are a number of environmental factors. That is why there is a great emphasis on eating at least 5 fruits and vegetables every day, trying to increase fiber content, trying to reduce the ingestion of foods that are high in dietary fat, and avoiding eating too much red meat because we know that when the GI tract digests those types of foods it can actually generate carcinogens, which can then stimulate those polyps to become cancer.
- Miller Is the incidence, the frequency of colon cancer, different in other parts of the world, and is that related to dietary habits?
- Chu The first thing to say is that while we have made great advances in all aspects of treating colon cancer, colon cancer today remains a significant public health problem in the United States and worldwide. In terms of cancer incidences, it is the number 3 cause of cancer in the United States. There will be about 150,000 new cases diagnosed in 2007. There will probably be about 10,000 to 12,000 cases diagnosed right here in the state of Connecticut. It is a number 2 killer with respect to cancers and about 50,000 people, unfortunately, will succumb to this disease. Worldwide, nearly a million cases of colon cancer are diagnosed. We do know that diet is an important factor because individuals living in Africa and in Asia for example, where there is a higher intake of fiber and a lower intake of high fat red meats, are clearly at a lower risk of getting colon cancer. It does seem that the instance of colon cancer is higher in more western industrial countries.
- Miller If someone modifies their diet, they have food with more fiber and less fat, can they modify their risk?
- Chu There is evidence to suggest that can happen, although it just does not happen overnight. That is why a lot of the studies that have been recently reported in various journals, such as New England Journal of Medicine, show that a high-fiber diet does not change the risk of polyp formation or transformation of polyps to colon cancer. The problem is, those studies were started on individuals pretty late in life, in their 40s and 50s, and for only a 1- or 2-year period. When you look at the individuals with the lowest risk of colon cancer, they are starting basically from the uterus in terms of a healthy diet.
- Miller So as parents or as adults in general, we have the opportunity to educate children and introduce them to healthier eating.
- Chu Absolutely, clearly nutrition is a key element to try to prevent the disease. We also know that exercise is a key element because patients who are overweight seem to have an increased risk of developing colon cancer. Also, abstinence from tobacco and alcohol can help reduce the risk.

- Miller If someone has already had colon cancer, or has had any type of cancer, do those same modifications in diet and exercise have an impact for them?
- Chu Absolutely, for all of my patients who have had colon cancer successfully treated, we strongly urge them to eat at least 5 fruits and vegetables, go to white meat as opposed to red meat, try to include daily exercise, and stay away from alcohol and tobacco.
- Miller I want to bring up a couple of things and see if these are myths or truths. One of them is that if someone does not have a family history of colon cancer that they do not need to worry about colon cancer.
- Chu That is a great question Ken. In fact, we know that up to 80% to 85% of all colon cancers do not have a family history. There may be some type of genetic component involved, but the fact of the matter is that up to 85% of all colon cancer patients will not have a family history. Obviously, if there is a family history, especially of a first-degree relative, that increases the risk significantly, up to 2 to 4 fold, but if one does not have a family history of colon cancer, they are still at risk. The most important thing to emphasize for our listeners is that the greatest risk factor for developing colon cancer is age. More than 90% of all colon cancer arises in individuals older than the age of 50; the average age is somewhere in the late 60s and early 70s.
- Miller Along those lines, let us talk a little bit about screening. This is a wonderful opportunity in the month of March, which is Colon Cancer Awareness Month, for all of us to learn more. Based on age, who should be screened and how often?
- Chu The general recommendation that has been put forth by the American Cancer Society and the Centers for Disease Control, is that for individuals at average risk, which is probably the majority of patients in the state of Connecticut and in this country, they should start colon cancer screening by the age of 50; there are a number of different screening modalities. In my own view, the gold standard of screening is a colonoscopy, which is to insert a tube and to visualize the entire colorectal region.
- Miller We are going to come back to that in a minute because it is incredibly important information. We would like to remind you that you can e-mail your questions to us at Healthline@Yale.edu. We are going to take a short break for a medical minute. Please stay tuned to learn more information about colon cancer with Dr. Ed Chu from the Yale Cancer Center.

Medical Minute

The American Cancer Society estimates that in 2006 there will be over 62,000 new cases of melanoma in this country; 2400 patients are diagnosed annually in Connecticut alone. While melanoma accounts for only 4% of skin cancer cases, it causes the most skin cancer deaths. Early

detection is the key. When detected early, melanoma is easily treated and highly curable, however, the patients with advanced melanoma have more hope than ever before. Each day, the patients are surviving the disease due to increased access to advanced therapies and specialized care. New treatment options and surgical techniques are giving melanoma survivors more hope than they ever had before. Clinical trials are currently underway at the Yale Cancer Center, Connecticut's only federally designated comprehensive cancer center, to test innovative treatments for melanoma. Patients enrolled in these trials are given access to newly available medicines, which have not yet been improved by the Food and Drug Administration. This has been a medical minute brought to you by public service by Yale Cancer Center. For more information, visit our website at the Yale Cancer Center org.

Miller Welcome back to Healthline. This is Dr. Ken Miller, and I am here in the studio with my co-host Dr. Ed Chu, who is also our guest today, discussing the latest treatment options for people with colon cancer. Ed, I have another myth or truth for you, and that is that women are at lower risk for developing colon cancer and that their greatest concern should be breast and cervical cancer.

Chu In fact that is a myth. If you look at the incidence of colon cancer both in the United States and worldwide, it is actually equal between men and women. Women are at the same level of risk as their male counterparts. One of the problems, and you hit on it, is that there is so much focus on breast cancer and cervical cancer, both on the individual's part as well as the physicians, that they tend to forget about the potential risk for colon cancer. We do know that women who have a prior history of either breast cancer, ovarian cancer, or uterine cancer are at increased risk for developing colon cancer. The general rule again is that anyone with average risk for developing colon cancer, male or female, should undergo colon cancer screening. The golden standard that most people now view should be done is colonoscopy. What I find quite striking is that even in 2007, at most, 30% of the population in this country undergoes even one type of screening, let alone a colonoscopy. That is why, especially in this month of March, we really want to get the word out that screening is absolutely important; even if one does not get a colonoscopy, go see your family physician, have a complete physical examination, have your fecal occult blood test which checks the stool for the presence of blood. At least get started because it is really quite frightening to those of us who are involved in treating colon cancer, that still the vast majority of patients do not even think about getting screened for this disease.

Miller In Connecticut, there is estimated to be over 100,000 cancer survivors, and a lot of that is breast cancer survivors. Those women, who have been through the breast cancer experience and are doing well, obviously should have screening. Should their screening start a little bit earlier or be a little more vigorous? Any thoughts or recommendations on that?

Chu That is an interesting question. My view is that it depends upon the woman's age, but I would guess that the average age for woman with breast cancer is somewhere in the late 40s or early 50s.

They would fall into that general category anyway. Once they are older than 50, they should undergo colonoscopy.

Miller Some people know a lot about the actual screening and some don't. Is a colonoscopy a painful procedure?

Chu One of the myths or concerns that individuals have, I think for females in particular, is what they need to undergo prior to the colonoscopy; prep that needs to be taken. An individual has to drink a liquid which basically is a cathartic, and excrete out the entire contents within the intestine and colon so that the gastroenterologist or the surgeon can then visualize, with complete clarity, the entire bowel. Personally I have undergone 3 colonoscopies over a span of 15 years, in large part because there is a very strong family history of colon cancer in my family, and I have to say that from the first time I had the preparation for a colonoscopy, to the most recent time, things have dramatically changed. It is very easy on the body, so there is nothing to fear.

Miller I want to echo that too. I have had two, so you have me beat, but it really was not a difficult procedure and I would encourage everyone out there who is 50, or younger with risk factors, to start with screening. Are there any symptoms that should cause someone to go their doctor and say that they are worried about the risk of colon cancer?

Chu The typical symptoms that are associated with colon cancer would include belly pain, abdominal cramps, bloating sensation, a change in the bowels, especially in the nature of the stools, if there is a change in color or if you see blood. Weight loss and fatigue can be early symptoms as well. The most important point to emphasize is that in a good number of patients who present with colon cancer there will be absolutely no symptoms. In many cases it is a silent disease which emphasizes the point that screening and early detection are key to being able to cure this disease.

Miller Lots of tests done are diagnostic. For example, mammograms can find a cancer, though obviously it does not treat it. Is colonoscopy diagnostic, therapeutic or both?

Chu That is a terrific question. It is both. Colonoscopy is the key to identifying polyps and then typically those polyps will be removed, and again as we talked about in the first segment, all colon cancers that arise come from polyps. So, if the polyps are removed, then you are actually removing the key cause for developing colon cancer; that is preventive and therapeutic. It is diagnostic because if in fact there is a true cancer, we can get a diagnosis. Again, we know that when colon cancer is caught in its early stages, up to 90% to 95% of patients can in fact be cured.

Miller It sound like removing polyps can really help prevent the disease more directly than almost any other kind of cancer that we treat.

- Chu Absolutely. Again, this is where my own personal view comes in that colonoscopy is really the only true test for colon cancer. There are a number of very interesting noninvasive tests. There has been a great deal of publicity focussed on the role of virtual colonoscopy, which is a very sophisticated CT scan that employs a very high-powered computer software technology. What is nice about it is 10 to 15 minutes and you're out of there, you can go back to work; you can maintain your normal activities of daily living. The concern, unfortunately, is that if an abnormality is visualized on that very sophisticated CT scan, then the colonoscopy still needs to be done.
- Miller If the CT scan is negative, the virtual colonoscopy, does that rule out colon cancer?
- Chu It does not, because we also know that very small tumors can be missed by the virtual colonoscopy.
- Miller Thank you for sharing that. I think it is a question that people ask very frequently when it comes to screening. We would like to remind you to e-mail you question to us at Healthline@Yale.edu. We are going to take a short break for a survivor story. Please stay tuned to learn more about colon cancer with Dr. Ed Chu.

Survivor Story

A few years ago, the diagnosis of cancer was a death sentence for many patients, but today, thanks to advances in clinical research, we are turning the corner in the battle against cancer. There are over 10 million cancer survivors now living in the US. They are the true heroes in the war against cancer. Here is a story of a hero from Hamden.

Ten years ago, when I was diagnosed with aplastic anemia, there was no cure. After teaching math for 35 years, I was forced to retire. Then I met Dr. Tom Duffy of Yale Cancer Center. He told me about new procedure called a mini stem cell transplant. He encouraged me put my life in the hands of Dr. Stuart Seropian, one of the few doctors in the country doing this procedure. On January 17, 2004, I had a stem cell transplant at the Yale Cancer Center. At age 70, I feel like a new man. I owe a great debt of gratitude to the terrific staff at Yale Cancer Center. They literally saved my life. This survivor story has been brought to you by Yale Cancer Center.

- Miller Welcome back to Healthline. This is Dr. Ken Miller and I am here with Dr. Ed Chu, who is both my co-host and also our guest today, he is sharing the latest information about colon cancer in recognition of March as Colon Cancer Awareness Month. Ed, when someone has been diagnosed with early stage colon cancer where it is localized just to the lining of the bowel, what is the proper treatment?
- Chu Usually once colon cancer is diagnosed, and typically it is diagnosed by the gastroenterologist working in collaboration with the general internist or the family practitioner, that patient really

should be referred then to a medical center and be seen specifically by a medical oncologist, a surgical oncologist, and also a radiation oncologist. The key, especially for patients who are presenting with early stage colon cancer or rectal cancer, is to be seen by a multidisciplinary group working in concert to try and identify what the best treatment approach that should be taken is.

Miller What is better about being seen by a team versus an individual physician?

Chu For colorectal cancer, and pretty much all of the solid tumors that you and I deal with, I think that the optimal approach to evaluating and treating the patient is through this multidisciplinary, interdisciplinary team. For rectal cancer in particular, it is now a combined modality approach that integrates chemotherapy, which is a fancy word for cancer drugs, and radiation therapy, which is exposing the tumor to radiation in an attempt to try to shrink the tumor so that a surgeon can come in and have an easier chance of completely removing the tumor. Also for rectal cancer, the advantage of giving up front chemotherapy, radiation therapy followed by surgery, is that there is now a great deal of evidence showing that the anal sphincter and anal function can be preserved to a much greater extent.

Miller So some people who need to have a portion of the colon removed have an ostomy, which is a bag, and this is a big concern for people, but some of those people then may not need to have that type of procedure.

Chu That is right. When I started training 18 to 20 years ago, this was all initially in the domain of the surgeon, and the surgeons would go ahead and remove the tumor. Unfortunately, they would then subject the patient to an ostomy bag and the patient would have to live with those consequences and their quality of life might be impaired. Now over time, with all of the various clinical studies that have been done, it is clear that by having surgeons speaking with medical oncologists and radiation therapists, they can come up with much better strategies that can improve not only clinical outcome, but also strategies that can maintain and perhaps improve quality of life.

Miller Let us focus on this multidisciplinary approach. Can you give an example of a patient with rectal cancer where years ago they might have had surgery and now a less aggressive procedure might be available?

Chu In fact, just about 2 weeks ago, we saw a new patient, fairly young 45-year-old male, who presented with a large bulky tumor at the distal end, close to the rectal area. Working in collaboration with our surgical and radiation therapy colleagues, we decided that the best approach would be to give chemotherapy and radiation therapy up front for about 2 months, reevaluate at that time, and then if the tumor was shrinking and there was no evidence of disease anywhere else, have the colorectal surgeon go in and remove the tumor. This would be followed by an additional 4 months of what is called adjuvant chemotherapy. Even though we have given chemotherapy and radiation therapy to shrink the tumor, the surgeon has gone in to remove it. Unfortunately, the

cancer cells are pretty tricky, and they have found a way of getting into the systemic circulation. An important point I will emphasize is that we would like to believe all of our imaging tests, chest x-ray, CT scans, and MRIs are very sensitive, but unfortunately, they are not. It actually takes about 1 to 10 billion cancer cells in order for even our most sensitive imaging test to pick them up. This is why it has been shown that if you then give an additional 4 to 6 months of chemotherapy after the surgery is done, that can help to reduce the risk of the colon cancer from coming back.

Miller We actually had an e-mail about that. This is from a woman named Rebecca who lives in Wallingford. She says,

My father recently underwent surgery for colon cancer that was found on one of the lymph nodes near the colon contained cancer cells. What kind of treatment should he receive?

This individual has what we would call stage III colon cancer and standard of care will mean that individual should receive 6 months of adjuvant chemotherapy, which has been shown to not only reduce the risk of cancer from coming back, it is also has been shown to improve overall survival. The good news is that now we have a number of different chemotherapy choices that can be offered to this individual; some including intravenous medicines. There is an oral pill called Xeloda which has been shown to be effective.

Miller Essentially her father is at risk of recurrence, but by receiving chemotherapy you can lower that risk.

Chu Absolutely.

Miller There was actually a similar question about use of radiation therapy from an individual who underwent surgery; Matt from Suffield. He was talking about undergoing surgery for colon cancer and wanted to know whether radiation is typically necessary.

Chu In most cases with colon cancer, we do not typically recommend radiation therapy because the colon is very sensitive and there can be increased toxicity. In most cases we do reserve radiation therapy for the treatment of rectal cancer.

Miller Ed, the prognosis for a patient with colon cancer, how is it compared to what it was when you and I started, and where do you think we are headed?

Chu It has changed dramatically. There are a few key messages that I would like to leave our listening audience with. First, colon cancer is highly preventable and to re-emphasize my point, the gold standard for screening is colonoscopy. Colon cancer is highly curable. The key is early detection and the best way to catch colon cancer in early stage is through the use of colonoscopy. Colon cancer can be cured in up to 90% of patients when caught at an early stage. My final point is that

even when colon cancer is at a more advanced metastatic age, it is highly treatable. In contrast, when I first started, the median survival was less than a year and now we are talking about survival up to 3 years. Our view is that colon cancer is now becoming a chronic disease.

Miller Ed, I would like to thank you for taking time to discuss colon cancer with us today on Healthline. I want to also remind our listeners to tune into WTIC NewsTalk 1080 every Sunday morning at 8:30 a.m. for Healthline with the Yale Cancer Center.

Chu Our next program will feature a discussion of stem cell transplantation and our guest will be Dr. Stuart Seropian from Yale Cancer Center. Until then, this is Dr. Ed Chu and Dr. Ken Miller from the Yale Cancer Center wishing you a safe and healthy week.

You have been listening to Healthline, a joint venture of Yale Cancer Center and WTIC NewsTalk 1080. Join us next Sunday morning from 8:30 to 9:00 a.m. for another addition of Healthline on WTIC NewsTalk 1080.