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Welcome to Yale Cancer Answers with your host doctor Anees Chagpar. Yale Cancer Answers features the latest information on cancer care by welcoming oncologists and specialists who are on the forefront of the battle to fight cancer. This week it’s a conversation about pancreatic cancer with Doctor John Kunstman. Doctor Kunstman is assistant professor of surgical oncology at the Yale School of Medicine, where Doctor Chagpar is a professor of surgical oncology.

John, maybe we can start off by you telling us a little bit more about pancreatic cancer. How common is it? Who gets it, and why should we care? Well, I think there’s several components to that answer. Anybody can get pancreas cancer, but it is generally a disease that occurs as we age. There is a little bit more likelihood for men to get it,
but of course women can get pancreas cancer too. I think it’s a disease that we should all be aware of, because as most cancers can be screened for nowadays, pancreas cancer is one that we really don’t have an effective screening test for. So we want everybody to be aware of it. Also, by 2030, the National Cancer Institute predicts that pancreas cancer will be the second leading cause of cancer death in the United States, so I think it’s something that’s worth our attention. Why is it going to be the second leading cause of cancer related deaths? I hadn’t heard that before. Is it because it’s getting more common, or is it because it’s getting more lethal? There is an increase in the prevalence of pancreas cancer, although it’s not the main reason. The main reason is that the more common cancers that currently are more apt to cause cancer deaths in the United States, the treatment of those cancers, such as breast cancer or
lung cancer or colon cancer, which are all more common than pancreas cancer, are improving and the death rate is falling. Whereas in pancreas cancer the death rate hasn’t improved at the same rate. So let’s talk a little bit about pancreatic cancer and you mentioned that we don’t have screening for pancreatic cancer, but it certainly is a cancer that people should be aware of. How can people understand whether or not they have pancreatic cancer when there is no screening test. Can you tell us what the symptoms are that we might be looking out for? That’s a terrific question, and because that is one of the main reasons that the death rate for pancreas cancer is so high, and it’s viewed as such an aggressive cancer. Many times patients are unaware when they have a pancreas cancer until it’s become quite advanced and the symptoms are quite subtle. In terms of the symptoms that most people will experience there are very mild things like abdominal discomfort,
attributed to something else, such as a stomachache or just eating a bad meal or something like that. But for patients with pancreas cancer, that discomfort persists for a long time. It’s not episodic, it’s not going away. It’s something that really should lead to a visit to the doctor. Also, things that are not subtle but can sometimes go unrecognized by patients as being very important, are things like jaundice or pancreatitis. Those are obviously big time medical issues that deserve attention, but many times can go on unappreciated as pancreas cancer being the cause of those findings for too long. I’d also like to mention weight loss. Unfortunately, in the United States, many people have trouble losing weight and when we’re adults, it’s difficult to lose weight durably without a major lifestyle change, and many patients with pancreas cancer We noticed over the past weeks to months that they’ve lost weight without making any major lifestyle changes. Many patients with pancreas cancer find that the first sign was that unrecognized weight loss when they go
back and think about what might have happened prior to their diagnosis. After what duration of time should people with these symptoms go in and seek medical advice? Is that a day, a week, a month, a year? I think it really gets into the weeks, something that can be attributed to one of those other causes like a stomach bug. Usually we’re feeling better within a week once we start having those vague symptoms and they’re really starting to affect our lives once we get to the weeks time frame, it’s time to go see your doctor. Also same thing with the weight loss. A few pounds is not a big deal and it might just be that you’re doing better with your exercise regimen or watching what you eat a little bit better. But when we start losing 10, 15 or 20 pounds without making a major lifestyle change, that should start to wave the red flag a little bit. And so when we go to our doctor, what should we be expecting our doctor to do? It really should be a lot of questions, detailed questions when you go to see your doctor.
A physical examination for possible diagnosis of pancreas cancer. Apart from jaundice or the weight loss might not reveal a lot, but those careful questions about the nature of the symptoms, their duration and some of the specifics is really where the attention may bring up a possible diagnosis of a cancer you might want to prepare yourself for some uncomfortable questions too, about things like your bowel function because those can be affected by a pancreas cancer. And those are just your doctor trying to get to the bottom of those symptoms or findings. Should we be more concerned if we have a family history? Is pancreatic cancer one of those where we should get to know our family history and who’s got what? Because that might increase our risk. It is actually that’s one of the major risk factors for pancreas cancer. There are some minor risk factors that we can affect with our own lives, for instance, cigarette smoking or exposure to certain chemicals like asbestos do have a correlation with a higher risk for pancreas cancer.
But that increase in risk is actually rather small. However, family history is a very strong risk factor for pancreas cancer, and it’s thought that about 10% or maybe even a little more than that cases of pancreas cancer are hereditary in nature. If you have a primary relative, in other words, a sibling or parent that has pancreas cancer, your risk of getting pancreas cancer yourself is about four or five times higher. And if you have two first degree relatives, that risk goes up to six to seven times higher, so it is something that we should be aware of. And that we should be thinking about in terms of what our family knows.

The other thing I just want to mention is that we talked about screening briefly before and for asymptomatic patients or patients with those vague symptoms, there’s really no role with our current tools for screening for pancreas cancer. However, those patients that do have a strong family history, there are screening programs available, and it appears even in these early stages of those screening programs.
that they might be effective at improving outcomes for patients. What do they screen with? So that’s a little bit of a debate right now. When we started screening for pancreas cancer and by we I mean the medical community, there was a very big debate about the best way to do it, and there’s a few modalities that are available. Most of them are centered on imaging, such as CT or MRI, and right now we think that MRI is probably the better way to screen simply because there’s less radiation exposure compared to CT scans. Also, endoscopy using a particular technique called endoscopic ultrasound, where a gastroenterologist uses a tiny ultrasound probe at the end of their endoscope to actually look through the walls of your stomach at the pancreas itself. Now, of course, that’s a procedure, but it’s a day procedure and most people can go home immediately thereafter, not unlike a colonoscopy. Those screening programs right now generally use a combination of those
two techniques and imaging
and some programs alternate them.
And so John, a couple of questions on that.
First, how often are these
done in the screening programs?
Like is this an annual thing or
is it more like a colonoscopy
where you can go for 10 years?
So right now it’s an annual
ingthing or even semianual,
depending on the risk,
and I just want to point out that this
is an area of active investigation right now.
There are several trials ongoing
at major centers that do these
screening programs investigating
what the best modality is for
not only detecting the cancer
but using the information that’s
generated from that screening.
And so that brings up
another question which is that many screening tests,
mammograms, colonoscopies,
PAP tests, are covered by insurance.
It sounds like this MRI and endoscopic ultrasound might be really expensive tests.
Are they covered by insurance or is this
covered experimental right now?
That’s a great question too.
In general they are covered.
There are some active research protocols.
If you are included in those active research protocols, generally the research study pays for the test, but most patients will find that it’s covered one way or the other.

My other question is, are there any blood tests for screening of pancreatic cancer? Many people are interested in the least invasive way to screen for cancer and are always thinking about tumor markers that might show up that might tell them that they are at increased risk for cancer. Anything like that in pancreatic cancer?

There are some tumor markers that are fairly specific and sensitive for pancreas cancer, but those markers can also be elevated in patients without cancer, just as part of their day-to-day life. So for that reason, in asymptomatic patients or patients at average risk, we don’t recommend any blood tests right now. That may sound a little bit strange to have a marker that we don’t use in routine tests, but I’ll give you an example. One of those markers is called CA 19-9, which is a blood marker, and that marker is elevated in most
patients with pancreas cancer. However, that marker is secreted by the Biome. That’s how it’s metabolised in the body. So that means somebody that may have a little bit of sludge in their bile or even a gallstone which has nothing to do at all with pancreas cancer could have a very high C 19-9. So we don’t want to have patients get screened and go through an enormous amount of testing, some of which might be invasive for something that’s just a red herring. The other question that I have is you talked about people having a family history of pancreatic cancer being at four or five times the average population risk of developing pancreatic cancer. What if you don’t have a family history of pancreatic cancer, but you might have a family history of other cancers, say more common cancers like breast cancer or prostate cancer? Does that increase your risk of pancreatic cancer? Sometimes it does, and the two genes that are most closely correlated that people know about with breast cancer or ovarian cancer and some others is the BRCA one and two genes,
and those do convey a risk, particularly BRCA 2 for pancreas cancer.
For patients that have family that have those other types of cancers, especially multiple family members.
And I’m talking about again breast or ovarian cancer. It’s worth talking to your doctor about considering a genetics referral.
The medical genetics services at most centers now are well aware of these associations and can very easily with the blood test determine whether or not you have one of those mutations that you might be carrying that could increase your risk.
Well, we’re going to pick up this conversation right after we take a short break for a medical minute. Please stay tuned to learn more about the surgical care of pancreatic cancer with my guest Doctor John Kunstman.
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This is a medical minute about genetic testing which can be useful for people with certain types of cancer that seem to run in their families.
Patients that are considered at risk receive genetic counseling and testing so informed medical decisions can be based on their own personal risk assessment. Resources for genetic counseling and testing are available at federally designated comprehensive Cancer centers. Interdisciplinary teams include geneticists, genetic counselors, physicians, and nurses who work together to provide risk assessment and steps to prevent the development of cancer. More information is available at yalecancercenter.org. You’re listening to Connecticut public radio.

Welcome back to Yale Cancer Answers. This is doctor Anees Chagpar and I’m joined tonight by my guest Doctor John Kunstman and we are talking about the surgical care of pancreatic cancer and John right before the break you were mentioning that patients you might not have a family history who might not have a family history of pancreatic cancer but might have a family history of other cancers like breast and ovarian cancers like breast and ovarian cancer should probably go and seek genetic counseling because those BRCA one and two gene mutations
may increase their risk of pancreatic cancer as well, so are there other genetic syndromes that might also have implications for pancreatic cancer? Yeah, there are a few and some of them are quite rare, but one that also comes up not too infrequently is something called Lynch syndrome or hereditary nonpolyposis colon cancer. Now this disease is actually a constellation of genes that may or may not be mutated in a particular patient. And they are typically associated with colon cancer, hence the name. However, those screening programs we were talking about before for patients that do carry one of those mutations, again, screening programs would include them looking for pancreas cancer too, so I think it just underscores the need to really be in touch with your family medical history if you can, and if there is a strong family history, consider talking about it with your doctor and whether or not a genetics referral would be a good idea. John, I was wondering before the break you had mentioned the fact that
Pancreatic cancer can be increased in smokers and people who have been exposed to asbestos. We often think of those factors really playing into lung cancer as opposed to pancreatic cancer. But you also mentioned that one of the tumor markers for pancreatic cancer that CA 19-9 was one that was involved with the bile, and so I wonder whether things that affect the liver and the biliary system also affect pancreatic cancer? So are you at increased risk for example, if you are heavy on alcohol, or if you are obese, or if you have diabetes, any of those things that we think of that go along with liver disease also? Depending on which study you read. So let’s take those one at a time. In terms of lifestyle risk, there’s been a tremendous amount of study on pancreas cancer and those lifestyle considerations, and some have really not played out or have shown contradictory results. Depending on which study you read. And these are things like certain kinds of tea, red meat, vitamin D, etc.
However, alcohol, the chief risk comes from those patients that develop pancreatitis as a result of their alcohol use, as many of your listeners may know, folks can get pancreatitis from heavy alcohol use, or some patients can get it even with mild alcohol use. Now it’s not a subtle thing when you get pancreatitis, but for folks that have had multiple episodes, chronic pancreatitis if you will, the risk for pancreas cancer is much higher, extremely elevated. That can also happen to patients that have problems with recurrent gallstones that can create a phenomenon called gallstone pancreatitis quite different than the typical benign gallstones that lead to the discomfort people think about when they consider their gallbladder. But when any of those risk factors leads to pancreatitis, the risk for pancreas cancer goes up considerably. With regards to obesity, there is an association with a higher body mass index or risk of obesity.
that goes along with pancreas cancer. It’s not as strong as, say, family history or history of pancreatitis, but it is there and it’s particularly notable in patients that have a high BMI or obesity younger in life. And then I believe, the other one you mentioned was diabetes, and this is actually a bit of a confusing area. There is a very strong link with new onset diabetes and pancreas cancer, but all is not as it seems. Certainly that link is there, but most people that have newly diagnosed diabetes do not have pancreas cancer. However, for patients with the pancreas cancer, many of them will develop diabetes, hence the link. It turns out that it probably is not the diabetes itself that is creating the pancreas cancer, but the effect the cancer that’s growing in the pancreas has on our ability to metabolize glucose effectively. So in other words, it’s not the diabetes that seems to lead to the pancreas cancer.
Rather, it’s the pancreas cancer leading to the new diabetes. However, that link is not completely clear. It’s still again an area of pretty active research. The other thing that is interesting, I had a friend who not long ago was diagnosed with pancreatic cancer, and she had been a diabetic all her life and one of the things that tipped off her doctor to the diagnosis was the fact that her diabetes became more difficult to control. Is that something that people who are diabetics should be paying attention to as well? Yes, and I think that illustrates the point perfectly. It’s not so much that the diabetes was there, but it’s a sudden change. In other words, somebody that wasn’t diabetic may be in very good shape. No other risk factors for diabetes suddenly becomes diabetic or somebody that had a longtime case of diabetes with the medication management being very stable, suddenly worsening. And so all of these are good things to be
looking for when you go to see your doctor.
If you’re concerned about a potential diagnosis of pancreatic cancer,
which otherwise is a pretty sneaky cancer in terms of not really revealing itself.
How is the diagnosis made?
Well, generally speaking, the diagnosis is made in patients that have only subtle symptoms,
with imaging many times those findings that we talked about, say, worsening diabetes coupled with weight loss.
Or new abdominal complaints coupled with weight loss will lead to a scan,
typically a CAT scan or sometimes an MRI, and that’s usually the first hint that there could be something wrong now in patients that have new jaundice or something that’s a little bit more obvious,
sometimes the diagnosis is made in other ways,
but typically it’s imaging.
And then what happens? Do these patients get a biopsy?
Nowadays they typically do,
and one thing I think that’s important to highlight here and we’re sort of segueing into this is that this is a cancer that really requires a large expert team to manage.
Now we’re talking about radiology here.
with regards to CAT scans and MRIs

but ultimately when you

do get a new diagnosis,

it needs special cat scans and Mris,

an expert radiologist to interpret

them with regards to biopsy.

It’s typically done by a gastroenterologist

and the techniques that they use

are not the typical techniques they

use that and discovered ultrasound

that we were talking about before,

or they may even need to do a procedure

on the bile duct or pancreas.

So these are all expert procedures

and they really do require a big

team even before you get to the

involvement of an oncologist or surgeon.

And presumably you know these days

we talk on this show so much about

personalized medicine and genomics

and all of the fancy tests and assays.

Is pancreatic cancer in that realm as well?

Where

we’ve moved so far in terms of the medical

and surgical management of this disease,

that there are nuances in

terms of the pathology?

That’s a great point,

and it certainly applies for pancreas cancer.

Just in the last year,

I guess a little over a year,
The recommendation has come down from the NCI and the National Comprehensive Cancer Network, that every patient with a diagnosis of pancreas cancer, should have a genetics referral so that they can see whether any of those mutations are present.

Why are we doing that? We have all these new advances, including immunotherapy and targeted therapies. And we’re finding that more and more patients may have something particular to their case that will ultimately direct the treatment in a specific way.

And I think the other thing that’s important to point out here, and certainly was the case with my friend who was actually diagnosed in a smaller center. But I encouraged her to get a second opinion, and it changed the diagnosis from metastatic to the perception that this might not be metastatic and could potentially be resectable with a bit of chemotherapy first to see if we could shrink the disease. So can you talk about kind of
getting a second opinion and how important that is and whether it changes things and how frequently? It’s important for a couple of reasons and I don’t want to minimize the role every health care provider in system has in regards to battling this disease. Certainly the diagnosis can be made anywhere, but I think the important thing is you want to be managed, or at least have an opinion from a group that treats this disease frequently. Because there are a lot of nuances and one of them that you mentioned is determining whether or not a cancer of pancreas cancer can be removed with an operation we know with utter certainty that the patients that do the best are those that can have surgery to remove the tumor, and sometimes that opinion may change depending on whether you’re at an experienced center and quite honestly, it might change from one experienced center to another. The other thing too is that multidisciplinary management, even if a cancer cannot necessarily be removed in pancreas cancer.
many clinical trials with some of the newest agents that could be available to a patient, especially if they’re treated at a comprehensive Cancer Center. I think that’s a great point. And also we know in particular with the surgical outcomes folks do better if they’re at not just a surgeon that does a lot of pancreas cancer surgery, but at a center that does a lot of surgery because of that multi-disciplinary component, it’s the intensive care units, the radiologist, the gastro neurologist that are at a big center that does, you know 20-30, sometimes 100 plus cases a year. Those resources will be available at those centers and the outcomes are better in a commensurate way. And the other thing is, are all pancreatic cancers the same? I mean is this a homogeneous kind of disease or are there nuances and subtleties in terms of the different types of pancreatic cancer? There are and I think we talked a little bit about how some of the genetics of an individual tumor may actually change management from patient to patient.
One thing I would like to mention really quickly is that about 75% to 85% of cancers in the pancreas arise with association with a small polyp-like lesion in the pancreas. But about 15 to 20% arise in coordination with something called intraductal papillary mucinous neoplasms. And these pancreas cysts are unique because unlike most pancreas cancers, we can't detect them prior to the emergence of the cancer. But these lesions, these precancerous cysts can be detected on endoscopy or on CAT scans, and we really think this might be a way to start making a dent in a certain fraction of these patients that have I PMNS, where we might be able to treat them prior to the emergence of the cancer. So how would that work John?

Is that like you go for your yearly MRI because you're at high risk and they find this cystic lesion and you're able to remove it before it becomes a cancer. That's one scenario, another scenario that we're seeing very commonly as a patient might get a CAT scan or an MRI for something else.
Whether it’s back pain or they’re in a car accident, or any reason. And there’s a cyst seen in the pancreas, and one thing I just want to make sure your listeners understand is most pancreatic cysts are not precancerous, and these precancerous lesions won’t actually turn into a cancer, but some will, so risk stratification, and careful decision-making, which again takes an experienced, multidisciplinary group, is really the key to managing them. And when we do see one of these precancerous cysts, or I PMNS, that looks like it might be turning into a cancer, we can act on it to remove it prior to the emergence of an aggressive metastatic cancer. Doctor John Kuntsman is an assistant professor of surgical oncology at the Yale School of Medicine. If you have questions, the address is canceranswers@yale.edu and past editions of the program are available in audio and written form at yalecancercenter.org. We hope you’ll join us next week to learn more about the fight against