

Lung Cancer: Better Care and Treatment Options  
AM 570 KVI  
November 18, 2007  
Shilpen Patel, M.D.

Please remember the opinions expressed on Patient Power are not necessarily the views of Seattle Cancer Care Alliance, its medical staff or Patient Power. Our discussions are not a substitute for seeking medical advice or care from your own doctor. That's how you'll get care that's most appropriate for you.

## **INTRODUCTION**

### **Andrew Schorr:**

We are live on AM570 KVI, Andrew Schorr here with Patient Power coming up next. When you think about cancer, lung cancer is by far the biggest cancer killer, but we are making progress, and a lot of it right here in Seattle as they learn chemotherapy, radiation and surgery together. What are they doing? How does that make a difference for you?

Meet an inspiring patient and a medical expert from the Seattle Cancer Care Alliance and the University of Washington when we start Patient Power coming up right now.

Good morning KVI listeners and our listeners around the world. Andrew Schorr here with Patient Power. My little 10-year-old boy Eitan listens on his way to Sunday school now. I saw him after the show last Sunday and I said, "How did I do?" He said, "Dad, you do a pretty good job, but you're kind of like one of those 'easy listening' guys on radio. Very calm, very relaxed. You have to wake people up Sunday morning". So I had a cup of coffee, and for whatever reason I am just wired today so you'll have to put up with that, hopefully it adds impact to a very important topic.

We are live so I want to comment on something on the front page of the Seattle Times today. Sometimes I love what they do and sometimes, my brother journalists, I don't, but I really agree with this. There is a big headline Seattle Times investigation 'Miracle Machines, the 21st Century Snake Oil'. They have been investigating this guy who has been stealing millions of dollars from people which some supposed energy gizmo that will cure this and cure that. Folks, there is stuff like this on the radio, it's in conventions, it's in ads, whatever and you believe it and you spend money and you think it's going to cure your serious illness and help you live a long life. Most of it is baloney.

That's not what we do on Patient Power. On Patient Power we connect you with leading medical experts and help you make smart decisions and guide you in what you can research further. I'm really excited that pretty soon our Patient Power programs, these things that start on radio or internet radio and end up on our website [PatientPower.info](http://PatientPower.info) will soon be distributed also by a major search engine so people worldwide will be able to type in a condition, and today we are going to be

talking about lung cancer, and they will be there for all to see. Why would the search engine do it? Because what we do is extremely credible and authoritative, and we are not trying to sell you anything.

Let's talk about lung cancer. The statistics are daunting. That is you hear a lot about breast cancer, prostate cancer and colon cancer, as you should. Certainly in breast cancer screening is so important as it is in prostate cancer, etc. A colonoscopy is important. We tell people when they are 50 years old, to get one unless there is a family history, and then you want to get one earlier. All that is so important and preventable.

When you think about lung cancer, it is our biggest cancer killer. Very scary to me, and it accounts for a third of all cancer deaths in the country. Most of the time, maybe 90 percent of the time, yes, somebody smoked or their spouse smokes, or they were exposed to smoke all the time, but not always and yet there is progress being made. It's tough because it's often discovered later and so it is advanced and spread to other parts of the body. I am happy to say that the University of Washington and the Seattle Cancer Care Alliance has been have been helping pave the way in using therapies in a more targeted way and using try modality therapy that we will hear more about. How can that help people live longer and certainly live better?

## **DEB'S JOURNEY WITH LUNG CANCER**

### **Andrew Schorr:**

I want you to meet Deb Miller who is from Yakima, Washington. Deb back in March 2005 you were having a CT scan just to check on an abdominal condition. What did they see at that time by accident?

### **Deb:**

A two-centimeter nodule in my right lower lung.

### **Andrew Schorr:**

That was the beginning of your journey with lung cancer that has been going on for two, two and a half years now. You had surgery then to remove what they could.

### **Deb:**

Correct

### **Andrew Schorr:**

Then you started on chemotherapy, and all that was in Yakima, but eventually you came to the Seattle Cancer Care Alliance and the University of Washington for

targeted radiation, and you had some cancer that had spread to other parts of your body. Where did it spread to?

**Deb:**

In September 2006 I went in for a bone scan because of my arm pain and my hip pain and it had spread. I've got spots on my spine, and I had a tumor in my arm and in my hip. So, I had four weeks of radiation therapy on my right arm here in Yakima, and then in November I opted to go to Seattle to have the radiation done on my hip, and I had a nodule in my chest. So, I was referred to Dr. Patel.

**Andrew Schorr:**

We are going to meet your doctor in a minute. One comment I'd like to make is that you live in Yakima, and I know you and your husband Tony love to ride your Kawasaki Vulcan and go down the road. That's one of the joys in your life for many years, but it turned out that you needed to come regularly over three weeks every day, every weekday, for radiation. It was so important to you that you made the trip from Yakima back and forth to get that radiation.

**Deb:**

Yes it was.

**Andrew Schorr:**

Do you think it made a difference?

**Deb:**

Yes it did.

**Andrew Schorr:**

How are you doing today?

**Deb:**

I'm doing good. I'm stable, and I get CAT scans every eight weeks, and I'm doing excellent.

**Andrew Schorr:**

Let's meet your doctor, Deborah. Deborah continues on those motorcycle rides with Tony down the Yakima Valley Highway, right Deborah? Enjoying life.

**Deb:**

Correct.

**Andrew Schorr:**

Dr. Shilpen Patel is a radiation oncologist at the University of Washington and Seattle Cancer Care Alliance. So you had radiation therapy with Dr. Patel? She

also had chemotherapy, and I think you continue to get some chemotherapy right Deborah?

**Deb:**

Yes I do. It went into my liver in February, and then I had to go through 16 weeks of chemotherapy every week with Avastin every 21 days. Now I'm on Avastin every 21 days as maintenance.

**Andrew Schorr:**

We'll talk more about that. She had radiation with you Dr. Patel and she had surgery back in Yakima, and we'll hear about the surgeons that work as part of your team as well and of course chemotherapy with the medical oncology group. How are we doing with this sort of trimodality therapy now in trying to make progress in lung cancer, our biggest cancer killer?

**Dr. Patel:**

There are a lot of changes that have been happening in lung cancer. Good morning Deborah, by the way. How are you?

**Deb:**

Good morning, I'm fine thank you.

**Dr. Patel:**

So, there are a lot of changes that have been happening in lung cancer where we are trying to be more aggressive, and it's trying to find that exact therapeutic ratio or therapeutic index. We are able to maximize therapies but at the same time not have horrific side effects. It's this fine line that you are walking between those two. In terms of trimodality therapy, what we are trying to do these days is to maximally improve control of the disease at the primary site of disease, by using two types of local therapy including radiation therapy and surgery.

**Andrew Schorr:**

Are we making progress because lung cancer has been so daunting?

**Dr Patel:**

That's a good question. There has actually been a randomized study that has looked at combining radiation therapy along with chemotherapy and then following that up with surgery; What we are noticing is that you actually have an improved progression-free survival and overall survival when you select the appropriate patient. Of course this doesn't apply to every patient. Right now we're trying to define the best set of patients to basically receive that type of aggressive therapy. This speaks to how important it is to be evaluated by the entire team of radiation oncology, medical oncology and a thoracic surgeon.

**Andrew Schorr:**

We're going to find out much more. We welcome your calls on Patient Power as we discuss how to have progress. If this affects you in lung cancer give us a call on Patient Power. We've live on AM570 KVI on Patient Power. We'll be right back.

**Andrew Schorr:**

Welcome back live to AM570 KVI, Andrew Schorr here on Sundays on KVI. Today we are going to talk about lung cancer as we continue our discussion with Dr. Shilpen Patel who is a radiation oncologist. There is a lot of progress in delivering radiation helping people do better in hitting the cancer cells and avoiding the healthy tissues. We're going to learn about that. He is with the University of Washington and Seattle Cancer Care Alliance, and I want to thank them for the long-term support of Patient Power so we can do this week after week and also, Swedish Medical Center and Harborview Medical Center and the folks over at Evergreen Medical Center in Kirkland and the folks at the Senior Guidebook. They make this possible, and this is only program in the world like this, as I was telling Dr. Patel, where week after week we do this.

I also want to mention, I'll tell you more later in the program, but if you go to our website [PatientPower.info](http://PatientPower.info) all our programs including today's will be there for you whenever you want it with a transcript increasingly as well as audio. I'll tell you later about what we've got coming up this week.

**SEEKING A PHYSICIAN WHEN DIAGNOSED WITH CANCER****Andrew Schorr**

Let's go back to our discussion about lung cancer. Dr. Patel, so I said that it's our biggest cancer killer. Somebody gets diagnosed with lung cancer and you say 'oh my goodness', could you only have weeks to live? Could you be living years like Deb with the right therapy? Some people think that all cancers are alike. They're not. When somebody gets to you at Seattle Cancer Care Alliance and University of Washington how do you evaluate what someone's situation is? Not just where the cancer has spread but what is the biology of the cancer and what's the way to attack it?

**Dr. Patel:**

That's a good question. There are about 180,000 cases of lung cancer every year. There is a huge spectrum of how advanced some of these cancers present as well as the biology of each of these cancers. There are some that are super aggressive, and the best therapy for that is chemotherapy alone. Then there are others that are very indolent or basically don't grow very quickly. With these, you want to maximize as much therapy as you can without compromising the quality of life.

What I feel like is a good approach is to basically be evaluated by multiple specialists who are experts in lung cancer. At the University of Washington, you are seen by a medical oncologist, myself, a radiation oncologist who specializes in lung cancers, and a thoracic surgeon will see you. If we already know from the get go that it's really not going to help you to be seen by a surgeon or myself or a medical oncologist, then we will try to streamline that process because the last thing we want to do is waste a patient's time when they come to see us. After that process we sit down as a team and we discuss everyone's case with the radiologist and the pathologist. It's a very large team that ultimately evaluates each individual patient.

### **THE ROLE OF PATHOLOGISTS IN DIAGNOSING CANCER**

#### **Andrew Schorr:**

One point I'd like to make is that I'd like to remind people when we are talking about cancer, and you said one of the specialists we often don't talk about enough. The pathologist makes a big difference because you need to know what you are dealing with. Increasingly as we learn even at the molecular level not all cancers are alike. You want to know what does Deb Miller have or Mrs. Smith or Mr. Jones. What exactly are we dealing with? Not just how big a tumor is, or where it is, but what is it?

#### **Dr. Patel:**

Absolutely, and each of the histologies, the different types of cancer, act very differently. There are special stains that they do to figure out exactly what type of cancer we are dealing with. We are fortunate at the University of Washington because our pathologists see a lot of lung cancer, and so they are able to differentiate which ones fall into what category.

### **CHANGES IN RADIATION THERAPY**

#### **Andrew Schorr:**

Now a word about radiation oncology, your field. You probably have a great background in physics, and I bet you were very good at math.

#### **Dr. Patel:**

I guess I should say that I'm guilty of that. Ultimately though it translates into improving patient's lives.

#### **Andrew Schorr:**

So you are trying to fire this powerful radiation right where the cancer cells are and not damage healthy tissue because the name of the game is to have people have quality of life. Kill the cancer as much as you can, don't hurt healthy cells, don't cause damage and do no harm. As doctors, that's your oath, right? So you have

some really powerful and refined ways now to do that, don't you? Not just at the beginning of the treatment plan but throughout the treatment plan.

**Dr. Patel:**

Exactly. The big movement in the last few years I'd say is really to improve the quality of life. Yes we could give a large dose of radiation therapy, but the last thing we want to do is to have the patient end up on a ventilator because what's the point of continuing on because you are not going to be able to live or have an adequate quality of life at the end of all this. So ultimately what we're trying to do is maximize the amount of radiation therapy we give but again not cross over that line of how much therapy is too much therapy where your lungs are not going to be able to do their job so that you are able to breathe.

We've come up with a lot of new techniques over the last say five to ten years really ultimately that has led up to making sure that we are not giving too much dose. A lot of that is watching the tumor and targeting it as they go through say a 4D CT scan, which is one of the things we do at the University. We watch basically the lung move over time and the cancer move over time so that we are able target it in just that area, and you're not guessing anymore as to 'well, we think the lung would move maybe a centimeter or maybe two centimeters'. The last thing we need to do is radiate normal tissue that doesn't need to be radiated.

**Andrew Schorr:**

Is this what you call IGRT or Image Guided Radiation Therapy?

**Dr. Patel:**

That's part of the image-guided therapy. The other thing that we do is we will take one of the things that basically across the country that is slowly becoming more and more popular is called "KV imaging" where we're able to track where tumors are on a weekly basis and line them up so we are treating the exact area we want to do while they are going through therapy.

**Andrew Schorr:**

Remember we are talking about lung cancer, someone's breathing, so again you want to hit the cancer where it is and not where it isn't so that people can do well.

## **SCREENING FOR LUNG CANCER IN HIGH-RISK PATIENTS**

We're going to take a quick call from Patrick who is calling in from Seattle. Patrick, is it your mother who is dealing with lung cancer?

**Patrick:**

Yes it is.

**Andrew Schorr:**

What would you like to ask about today?

**Patrick:**

Basically she was diagnosed with non-small cell lung cancer as a result of having a scan, having various scans in reference of melanoma. My question is what do you think of the CT scan as a preventative measure for either high-risk individuals, smokers or former smokers on a periodic basis?

**Andrew Schorr:**

Right. There has been a question I think, wasn't there a study also about doing what I think you call spiral CT?

**Patrick:**

That's correct. The 64-slice spiral CT scan.

**Andrew Schorr:**

Let's find out. Dr. Patel, what's the word on that?

**Dr. Patel:**

That's an excellent question. That is something that really, at our international lung meeting this year, has really come up to fruition. There are a number of studies that came out probably five or ten years ago where they looked at 'if screening helps if you took a large population' and nobody was able to come up with a substantive benefit for screening. Unfortunately, on those studies they weren't figuring out which population we should be screening. Yes every Tom, Dick and Harry shouldn't get the screen. The patients that are at high risk those who have a large smoking history screening should be considered and that is something that we are developing at the Seattle Cancer Care Alliance and the University of Washington. It is actually going to be to target and screen those specific patients that would benefit from early intervention because we do know the earlier you catch this the more likely you are to cure this.

**Andrew Schorr:**

Is there a clinical trial yet at the University of Washington where families of smokers let's say would be in a trial and be screened more frequently?

**Dr. Patel:**

It is just now being developed, and so there will be within the next month or so.

**Andrew Schorr:**

Wow. Okay Patrick say tuned. All the best with your mom. I know it's a concern for the family and you're right. If we can screen people and catch lung cancer earlier it makes a big difference. I appreciate your call. Thank you Patrick.

We're going to take a break and when we come back we'll continue our discussion with Dr. Shilpen Patel who is a radiation oncologist and a lung cancer specialist at the University of Washington and Seattle Cancer Care Alliance. We'll also check in along the way with Deb his patient from Yakima who is doing well now about two and a half years out who has had metastatic lung cancer but is living her life riding that big Kawasaki Vulcan with her husband, and we are going to talk about how someone can have that quality of life even after such a serious diagnosis. It's all coming up live on AM570 KVI. We'll be right back.

**THE IMPORTANCE OF SEEKING OUT SECOND OPINIONS AND HAVING A SUBSPECIALIST EVALUATE YOUR SPECIFIC CONDITION****Andrew Schorr:**

Welcome back live as we continue Patient Power. Today we are talking about the cancer that unfortunately is the deadliest one we have as far as affecting the biggest number of people and that is lung cancer. Certainly we've talked a lot about breast cancer, colon cancer, prostate cancer and leukemias like I have. All of them are diagnoses that you worry about, and you want to hear about the latest treatment and we have discussed those and they are on [PatientPower.info](http://PatientPower.info) just waiting for you.

Today we are talking about lung cancer, and here is my question for you Dr. Patel. So it's very common and so any oncologist would see numerous patients during the year with lung cancer, but if you're making progress using modality A, B and C maybe together or which approach; surgery, chemotherapy, radiation; which drugs, learning about individualized care, it would seem to me that it is probably wise if people can, and certainly people around Seattle or even like Deb in Yakima, to check in with someone like you. You're a sub specialist. This is all you do. You may say 'yes the doctor in Yakima or Everett or wherever they may be, that's the treatment plan I agree with completely' or you may say 'you know we are looking at something new or there's this new trial'. I don't mean to be self-serving for you, but to me as a patient it makes sense, and it's what we talk about on Patient Power.

**Dr. Patel:**

There are definitely a number of patients that we see that come for second opinions and of course many people will come for first opinions. I always encourage my

patients to get as many opinions until they are comfortable with the treatment recommendations. I think that is very important. There are often times when we will see patients for second opinions, and we'll tell them that 'we think that the plan that you have in place is completely appropriate, there is nothing we can offer in addition to that'. At the same time we will occasionally say we do think that the treatment here would be superior or would in the end hopefully get better results. We could obviously never guarantee that. Of course I think in the end it depends on what you're looking for.

When you go out to the community, there is of course general radiation oncologists. There are no specialists that are out there. This is important so as to ensure that you have somebody who can basically cover all treatment sites. That's basically what patients in the community need. When you come to a large academic center, you have a lot of specialists which has its pros and cons. Obviously if you have somebody who specializes in a certain body site, they are able to focus on the literature and they are always keeping up to what is the best way to treat this certain disease site and the best way to preserve quality of life. They are trying to answer the question, 'What's the best way to maximize our therapies so that we are in the end hopefully going to achieve a superior result?' Not that that can't be done in the community, but at the same time there is so much new literature that comes out every day on the various types of cancer that are out there. It is virtually impossible to keep up with all of that. With the fact that my scope of practice or the amount of the type of patients I see is virtually very small, (I basically see patients who have cancers in the chest region and along the gastrointestinal tract) you are basically being able to focus in on just that type of cancer and learn a lot about those sites.

### **Andrew Schorr:**

Dr. Patel just really underscored the Patient Power rule number one. That is if you are diagnosed with a serious condition and in the case of lung cancer a life threatening condition that could be very much a life shortening condition, then it behooves you to check in with someone who I like to say eats, drinks, and sleeps what you've got. Who keeps up with the research, and sees patients with that because really Dr. Patel as we try to learn better about how we ideally could cure lung cancer, but certainly let people live longer and live better, there is a lot of art to it as well. If you are seeing several patients a day, there is learning going on for you. Not just what you read but what you do.

The other part of it I would say is typically at some of these large centers like the University of Washington and Seattle Cancer Care Alliance there is a team not just you in radiation oncology but when we talk about this trimodality in lung cancer, there are surgeons who just do this, right? You have pathologists who particularly track this, and you have medical oncologists like Dr. Martins, my friend who has

been on Patient Power a number of times. This is what he does. Then you all sit down together to discuss a case like Deborah.

Deborah, I want to put you back on for just a second. You made the trip day after day for radiation. Was it worth it?

**Deb:**

Yes it was.

**Andrew Schorr:**

There you were two and a half hours down the road then two and a half hours back. Do you think it has helped for why you are with us today and being able to enjoy some quality of life now?

**Deb:**

Yes I do believe that is true. Dr. Patel is awesome.

**Andrew Schorr:**

Yes he is. He's a neat guy and I think that's the commitment. So what I would tell people, and again I'm saying it from the patient's perspective because I did it in my leukemia, is it means a lot and I think it will give you a lot of comfort if you check in with somebody who specializes in that. It amazes me when people say 'well, you know this is most convenient for me' for whatever the condition may be. I think when we are talking about lung cancer, and I would underscore too about leukemia or it could be lupus it doesn't have to be a cancer, is convenience what we are talking about or are we talking about life? I don't mean to shake everybody up on a Sunday morning, but someone in your family will be diagnosed with a serious condition. Hopefully it won't be you, but it is going to happen as we age. Particularly as we age cancer becomes more common. I think the statistics are men over their lifetime have a one in two chance of being diagnosed with cancer, and women have a one in three chance. Women often talk about the breast cancer statistic but, for instance, for African American women, am I right Dr. Patel; lung cancer is all too common.

**Dr. Patel:**

Absolutely.

**Andrew Schorr:**

We're going to talk about what you can do for prevention. Patrick asked what can we do about early screening? We'll have our antismoking message in just a minute too. Fortunately I was down in Houston the other day and was in a restaurant and all of a sudden I looked around and no there was no smoke. Just there in Texas

now no smoking in those restaurants, and we've done it here in Seattle. It makes a difference. We'll be back with more of Patient Power when we continue right after this.

**Andrew Schorr:**

Welcome back to Patient Power live on AM570 KVI. Andrew Schorr here. I am excited about the Seahawks game today. You may be headed that way. I am also excited for the UW Huskies. I didn't go there but good for them, even without Jake Locker. It was a wonderful victory for them. About the Seahawks, why am I excited? I do these programs not only on KVI but also on the Internet with medical centers around the country. One of them is Northwestern in Chicago, and when the Seahawks lost to the Bears last year I got tremendous flack, so please Mr. and Mrs. Seahawks cheer for the Seahawks today especially loudly, and let's have that victory, and I know they will. Have a great game later today, and we'll be watching.

**SMOKING AND LUNG CANCER: THE CONNECTION**

Today we are talking about lung cancer, and as I said it is the cancer that is responsible for more cancer deaths. If you put colon cancer, breast cancer and prostate cancer all together and you say look at all the people who are dying from those illnesses, lung cancer is more.

We are blessed here in Seattle. We've got teams of people who specialize in just that. We were mentioning Dr. Patel how important it is first of all for people to know most of these cancers, the lung cancers, come out of people smoking. It just pains me when I see a young person smoking. I want to say 'don't you know?' I know that it usually takes years and years to develop, but you see it every day and they tell their story. Most often they were smokers, right?

**Dr. Patel:**

Absolutely. About 90 to 95 percent depending on which study you look at of lung cancer is associated with smoking. That is usually the primary smoking. It is often occasionally second had smoking as well. In this day and age, medicine doctors are constantly saying don't smoke around your kids or don't smoke period. There are multiple ways to go about quitting smoking. It is a very difficult addiction to kick completely, and I sympathize with patients that have to go through that. Obviously, the best thing is obviously not to start in the first place, so we need to educate kids about the dangers of smoking are out there not only in terms of lung cancer, but of course it's going to decrease the function of your lungs, in which case you are going to end up with emphysema and COPD, and you're going to have to be on inhalers and all these other medications. In addition, it is also worth making a note about the other number one killer in America which is heart disease. Smoking is definitely associated with that. You have a tremendous amount of

medical problems if you smoke. I encourage my patients, if they are smoking to stop smoking. There are multiple new therapies that are out there in this day and age that you can use. If you've tried something in the past, we encourage you to broach the subject again with your physicians because there are new therapies that are out there.

**Andrew Schorr:**

My dad smoked for years. He actually ended up starting to get circulation problems, and the doctor was trying to convince him to stop smoking, and he took him back out in the waiting room. This was about 50 years ago. He said, 'do you see that guy over there?' His arm had been removed and a leg had been amputated because of tremendous circulation problems. He said 'you're headed that way'.

Dr. Patel sees folks in the hospital who were smokers with end stage lung cancer disease. We don't want you to get there.

**Dr. Patel:**

I'd much rather see you personally and not in a professional setting.

**WHERE DOES LUNG CANCER COME FROM IN PATIENTS WHO DO NOT SMOKE?**

**Andrew Schorr:**

It does happen, as it did in Deb's case where there was no smoking. Do we have any idea where that comes from?

**Dr. Patel:**

That's a good question. There are many, many theories out there in terms of well is there some kind of low threshold for second hand smoke or is there some kind of virus or something to that effect? It is the rare instance in which case that happens. There are, like I said, a number of theories out there, but none of them have truly panned out. There are some people who say that radon gas definitely is a linkage.

**Andrew Schorr:**

We wonder about pesticides or she's on the motorcycle going through the countryside in farm country and all that. Is that any kind of exposure? We have no evidence at this point.

## **WHEN ARE THE NEW APPROACHES IN TREATMENT APPROPRIATE?**

### **Andrew Schorr:**

You watch ads on TV and there are new cars with new gizmos; got to have one. So a hospital hears about a new multimillion-dollar gizmo for radiation and says 'got to have it'. Then they start advertising. The doctors say that they have the new gizmo for targeted radiation, or there are new approaches to surgery and things like that. Isn't the art of medicine knowing what tool to use and when? For instance, there is a kind of cancer of the lining of the lung, you were telling me about during the break. Help me understand where these new approaches work or maybe are not advisable.

### **Dr. Patel:**

Andrew I think there are a number of new technologies that have come out. There are a number of new drugs that have come out almost on a daily or almost monthly basis. Ultimately it depends on when to use it appropriately, and I think that you hit the nail on the head in that sense.

Off the air, we were previously talking about mesothelioma actually. Mesothelioma is usually caused by asbestos or in the ship building yards, which obviously is very common here in Seattle since we are a port town. Basically there is an irritation that happens in the lining, and you have formed this cancer basically in between your lung and your chest wall. Unfortunately it is a very aggressive cancer, and what we've done in the past is for patients to try to go through a trimodality approach where we are giving chemotherapy followed by surgery followed by radiation therapy.

What a lot of people in this country did a few years back was use something called intensity modulated radiation therapy which is kind of a fancy way to say that, the radiation goes to certain parts of the lung and does not affect other parts of the lung. Unfortunately, what we realized was that in 2006 a study came out that showed that you had a 50% mortality; that 50% of the patients that were undergoing this therapy actually died from the radiation therapy itself, which is exceedingly high. To appreciate the scope of this, most patients I would say with death from radiation therapy is probably maybe less than one percent. So when you are seeing something of a 50% nature it's going to scare basically everyone across the country.

Unfortunately, like I mentioned earlier, there is so much literature out there that it's hard to keep up with this, and so eventually people are slowly learning about that, and we are learning when it is appropriate to use intensely modulated radiation therapy. Just because you have that tool, and there are a number of other tools like the IGRT and the IMRT and all these other acronyms that physicians come up

with sometimes to confuse patients, that you basically have to pick and choose what you use in the end.

**Andrew Schorr:**

Okay so Patient Power rule number two we are going to have here, Dr. Patel, and that is new is not always better just because it's new. You've got to ask questions. Let's take a call from Ed in Seattle. Ed Welcome to Patient Power.

**THE EFFECTS OF SECOND-HAND SMOKE**

**Ed:**

Good morning. I want to ask a question here and then I'll take the answer off the air. I am 67 years old. I'm in good health. I'm not overweight or anything like that, but I grew up in the 1940's and 1950's, and I breathed a lot of secondary smoke. A lot of it you know, but I've never had any problems from it, but I'm obviously curious. Does that have any long-term effects on a person?

**Andrew Schorr:**

Thank you for calling Ed. We'll let you listen off the air. Ed, we all worry about that and that is if your spouse or your coworkers are smoking like crazy and you are breathing it in and you aren't the smoker, is another shoe going to drop now years later? Dr. Patel what do we know about that?

**Dr. Patel:**

That's a good question. Unfortunately, there isn't a large amount of long-term data in terms of that. We don't know exactly which patients are going to fall into that, and I think that is one of the reasons why a number of studies are developing like the one that we are developing at the University of Washington to basically look and see which patients are truly going to be at risk for that. Unfortunately, because lung cancer is one of those that is a deep-seated tumor; it is difficult to find early until it is sometimes too late. Unfortunately and maybe rightfully so insurance companies are not going to screen all the patients across the country because you feel you are at risk. It's a very difficult situation to be in, but we do know that second hand smoke, definitely does cause some significant damage to your lungs and often the damage is irreversible. What we do know is that if you do stop smoking they say hypothetically speaking five, seven or ten years down the line your lung function will improve, and you clearly will decrease your risk of lung cancer at that point. That we have seen.

**Andrew Schorr:**

Right, and I think about my mother-in-law who quit smoking after many years as a wedding present to us. Ethel, thank you for doing that. I wonder now because I've been married 21 almost 22 years. Maybe it is 22 years, Ester? I think it is 22 years. I've got to remember. We just had our anniversary. Is she now, are her

lungs back in shape? When you quit smoking then your cancer risk goes down over time. Do you get back to baseline?

**Dr. Patel:**

You never, unfortunately, get back to baseline completely. Clearly ideally you never want to start smoking, but you definitely significantly improve your overall health, and clearly you are not adding the toxicity that you got from the daily smoking or the weekly smoking or the monthly smoking that is going to build. So there is some, unfortunately, irreversible damage that happens every time as this accumulates, but you will significantly decrease your risk of lung cancer.

**Andrew Schorr:**

Right and as you said earlier, Dr. Patel, we are not just talking about cancer when we are talking about smoking. We are talking about heart disease. We're talking about asthma, COPD and emphysema all those things together. So again there is our plea. Please stop smoking or don't smoke. I certainly avoid people who smoke. I step away. If I were single, I wouldn't date somebody who smokes. Those are all choices we can make, but try to help people knowing that it's tough to quit, and I certainly understand that.

We're going to come back in a minute. What I'd like to understand is how your teams work together. You are doing something called video-assisted thoracic surgery. You have targeted radiation. Dr. Martins and your friends who are medical oncologists have more targeted therapies. All that works together. I also want to get a final comment from Deb Miller out in Yakima who has been living all this. We'll be back with more Patient Power right after this.

**Andrew Schorr:**

Thank you for joining us on Patient Power. Please tell others about it. There is no other program like this in the world really. Next week at this time we are going to have on Dr. David Clawson who is an orthopedic surgeon at Swedish medical Center and we are going to discuss spine surgery, rehabilitation, and spinal health. I'm sure we are going to deal with back problems that affect so many millions of people. I also want to recommend that you please, please, please take a look at PatientPower.info our website. About 4,000 people a day do. That's growing, particularly as we will be kicking off our relationship with a major search engine. A lot of people will be going there.

We did earlier do a program with Dr. Mike Mulligan who is a thoracic surgeon at the Seattle Cancer Care Alliance. For people looking for at this whole lung cancer issue, you could learn about where surgery comes in too. Then of course about chemotherapy and targeted drug therapies, we have a program with Dr. Renato

Martins, its spelled "Martins" but it's pronounced "Marteens," he's Brazilian. Just search on "Martins" or search on lung cancer. It's all there for you on Patient Power.

One other quick comment; I do web casts all during the week, and so you can listen to those live. Tomorrow at 10:00AM Pacific we'll be talking about heart arrhythmias with an expert from Oregon Health Sciences University in Portland. That's tomorrow on heart issues.

## **A TEAM-BASED APPROACH TO LUNG CANCER TREATMENT**

### **Andrew Schorr**

Dr. Patel, just briefly about these other modalities. You do radiation but you work with a team so we have Dr. Martins and his peers who are medical oncologists specializing in lung cancer. Then we have folks like Dr. Mulligan who are surgeons and this is what they do, thoracic surgery. In the area of surgery now they can do sort of minimally invasive surgery using laparoscope's I guess, and use a video camera to try to, again, cut out the cancer and not damage healthy tissue, right?

### **Dr. Patel:**

Exactly, so again it speaks to the fact that we want to preserve quality of life. We want to get patients as healthy as quickly as possible as well in the end when you are going through this therapy. What they have seen is if patients are appropriate candidates for video assisted therapies surgery, VATS is what we call it for short, then that may be an appropriate option for them because we do know that you may be able to recover from that. I'm definitely not a surgeon, so I'm not the best person to ask that, but the good news is that we have a team-based approach. We all rely on each other for each of our expertise.

### **Andrew Schorr:**

Also, related to targeted drug therapies Dr. Martins I know has done trials related to Avastin that is one of the drugs we've been hearing about. There are others. Knowing which drug therapy is the therapy for you and when and when do these other modalities come into play. As you say, you are talking about this every week as a group

### **Dr. Patel:**

Exactly. We do sit down at least once a week and go through all of the patients that are controversial, the ones who we have questions on, or the ones that affect multiple specialties. We'll sit down and we'll go through all those patients. We also have a clinic where a number of our specialists, Dr. Wood and Dr. Mulligan who are thoracic surgeons, Dr. Martins, Dr. Carr and Dr. Eaton who are medical oncologists and myself, will see patients so you are able to basically see all of the specialists all in one setting and at the end of it hopefully rendered an opinion so that you know

exactly what the next steps are going to be, and you are not waiting for the next appointment and the next appointment and a week later and another week later and what not.

**Andrew Schorr:**

Great point. Here is a phone number for your department there: 206.598.4100. Again you can go on the Seattle Cancer Care Alliance website and look up Dr. Shilpen Patel who has been our guest today and that is [www.Seattlecca.org](http://www.Seattlecca.org) and you can look up all these specialists. I want to get a comment from Deb Miller who is out there in Yakima. Deb what would you say? You made the trip from Yakima to consult with Dr. Patel. I think you would agree he is a specialist in what you've got when it comes to radiation. What would you say to people who say 'well, I don't know, should I go to that trouble?'

**Deb:**

You have to be an advocate for your own health. From the moment that I met Dr. Patel I knew that we had made the right decision to travel over to the University of Washington.

**Andrew Schorr:**

I couldn't agree with you more. Folks, you have to be an advocate. These are complicated issues now, trying to cure lung cancer if we could or give people as great a quality of life as we fight it and have that treatment tailored to you. Deb I wish you all the best. Many motorcycle rides with Tony okay? If I'm somewhere driving along the Yakima Valley highway and I see a Kawasaki Vulcan go by, I'm going to wave because that's you and Tony, and I hope you can be doing that for many years. Thanks for joining us.

**Deb:**

Thank you very much.

**Andrew Schorr:**

I meet the neatest people Dr. Patel and you are too. Thank you for being with us and thanks for your dedication to people who are fighting lung cancer. All the best, and lets cure it okay?

**Dr. Patel:**

That's the plan. Thank you for having me on.



**Andrew Schorr:**

Thank you. As always folks, knowledge can be the best medicine of all. That's my Sunday sermon. Knowledge can be the best medicine of all. Have a great day. Join us on [www.PatientPower.info](http://www.PatientPower.info). Tune in about spinal problems next week, and go Seahawks. We'll see you. Andrew Schorr in Seattle signing off.

Please remember the opinions expressed on Patient Power are not necessarily the views of Seattle Cancer Care Alliance, its medical staff or Patient Power. Our discussions are not a substitute for seeking medical advice or care from your own doctor. That's how you'll get care that's most appropriate for you.