The Brain Trust Podcast | Episode 2: Understanding Dementia and Alzheimer's Transcript

Speaker 1: Kate Rowland, MD

Welcome to the Brain Trust, A Physician's Guide to Diagnosing Alzheimer's Disease and Related Dementias. Brought to you from the Illinois Academy of Family Physicians. I'm Dr. Kate Rowland, family physician, member of the IAFP and faculty at Rush University. Funding for this podcast series was provided by a grant from the Illinois Department of Public Health. The goal of the Brain trust in this podcast series is to educate and empower the primary care clinician in the early detection, diagnosis and management of Alzheimer's disease and related dementias.

Clinical resources, Free CME and other educational materials are available online at the BrainTrustProject.com. CME Credit is available for each podcast. The Illinois Academy of Family Physicians is accredited by the Accreditation Council of Continuing Medical Education to provide continuing medical education for physicians. Information on how to receive credit can be found on the Brain Trust Project website.

Thank you for joining us as we empower each other and provide training on the early detection of Alzheimer's disease and related dementias. And now today's episode.

Speaker 2: Raj Shah, MD

This is Raj Shah, a professor and family medicine and preventive medicine at Rush Alzheimer's Disease Center at Rush University in Chicago, Illinois. In our docs diagnosing dementia today, our objective is to talk a little bit about dementia. Just get all on the same page and I'm driving down to Springfield based on the recommendation from the IAFP that I talk with Dr. Eukesh Ranjit about some of what we're understanding around dementia.

So, Dr. Ranjit, thanks for being here and letting me come down and visit you today. How are you doing?

Speaker 3: Eukesh Ranjit, MD

Hi Raj, I'm doing great today. Welcome to Springfield Road. And how is your drive?

Speaker 2: Raj Shah, MD

The drive is pretty straightforward. I ran out of my tea about halfway through and I wish there was a place I could have stopped by. But it didn't work today. But I'll have to get a recommendation from you on my way out about where I can go at Springfield. But you can tell me a little bit about how long you've been in Springfield.

Speaker 3: Eukesh Ranjit, MD

So, I have been in Springfield for nearly two years now. I am actually not from here. You know, I came over here to work over here in SIU Center for Family Medicine, and it's been a great experience so far.

Speaker 2: Raj Shah, MD

Oh, wow. Yeah. Three years. Sure does go by fast, doesn't it?

Speaker 3: Eukesh Ranjit, MD

Absolutely.

Speaker 2: Raj Shah, MD

It's hard for me to think that I've been at Rush now almost 20 years and the days just fly by. But tell me a little bit about your training before you joined the practice here at SIU.

Speaker 3: Eukesh Ranjit, MD

Sure. So, my training goes back to my home country of Nepal. I did my med school over there in the university called Kathmandu University over there following which I came to the United States. I did my family medicine residency and Louisiana State University. Go Tigers. From there, I moved on to UCLA and West Coast, where I did my fellowship in geriatrics, following my fellowship in geriatrics, I was looking for places where I could make an impact in the community, where I could practice as a primary care. Physicians at the same time work in geriatrics as well. And I was primarily interested in underserved population. I was looking for places all over the country, and I talked to people over here in Southern Illinois University who are doing a great job at serving the underserved population over here. And that's how I ended up over here.

Speaker 2: Raj Shah, MD

Yeah, and that's a little bit of what I was curious about was about this large SIU family practice center. Can you tell me a little bit about where we're at right now and what community the SIU Family Practice Center serves?

Speaker 3: Eukesh Ranjit, MD

Absolutely. Sure. We are currently in the SIU Center for Family Medicine building over here in Springfield. We are primarily a family medicine center, so we have providers who have specialized the family medicine. We have 4 to 5 clinics that are ongoing at the same time. It's a pretty big center for family medicine. Besides family medicine, we also have other subspecialists who come over here and service and help us with their specialties.

We have cardiology team who come over here in our clinic. We have a psychiatric, we have behavioral health counselor on spot. We have social workers. So, it's a very good sized center serving the population, not just here in Springfield, but we serve the population throughout the central Illinois.

Speaker 2: Raj Shah, MD

Yeah, And I think you're also a residency program. So, you're also training.

Speaker 3: Eukesh Ranjit, MD

Yes. So, we have a residency program over here. So, we have a family medicine residency, and we have ten residents who graduate every year of the year. We have an exceptional gift for residents, and this serves as a primary site for their training as well.

Speaker 2: Raj Shah, MD

Wow. That's a really big program and doing a lot of good work in central and southern Illinois. And tell me a little bit about the patients. I mean, are you I know in family medicine, we take care of people across the lifespan. And that's a big part of the wonder and the capabilities in family medicine is that we see people from birth all the way into their old age.

And tell me a little bit about how many older adults you see in the practice here.

Speaker 3: Eukesh Ranjit, MD

Absolutely. So here in SUI center for family medicine, we have different kind of family physicians. We do have family physicians who have specialized, for example, in sleep medicine, some in sports medicine and geriatrics as well. I primarily take care of our geriatric population over here. I have a continuity panel of geriatric patients as well as I do consult in geriatrics in which we collaborate with various other providers in taking care of older patients.

Those are the two kinds of primary or outpatient clinics that we participate in besides these. We also take care of patients in nursing homes and assisted livings. We serve in three nursing homes at the moment, and we serve in there six assisted living. So, at the moment we also do something called home based primary care, where, you know, patients who are homebound and cannot come to the clinic. We go to their homes and take care of those patients. We have that service established as well. Also, as part of my service over here, where we do take care of patients who are in inpatient service. Besides, these are we also take care of patients down in Carbondale area, where I visit the Carbondale SIU clinic once a month for two days.

So going back to your question, we serve a very large population of elder population over here that answers that question.

Speaker 2: Raj Shah, MD

Yeah, no, definitely. Because I mean, as we've been noticing in the state of Illinois, where we think there's over a million older adults in the state, that we are seeing more in sort of the rural areas as populations are aging faster in rural spaces. And I'm sure you're providing a lot of great services to the older adults in your community and the people that support them along the way.

Which brings me to this conversation around dementia. One of the things that always strikes me is that there's this report that is put out the facts and figures, a report every year by the Alzheimer's Association. And one piece of it is that they give information about how many residents they think might have Alzheimer's disease or a related dementia at a particular time.

And for Illinois, it was about 230,000 people that potentially have a dementia. And we know that maybe about half of them may not even have a diagnosis of a dementia. And we use just sort of a probabilistic estimate of that 230,000. But, you know, it's sometimes hard, we still have issues around talking about dementia and patients sometimes get confused about what we mean when we say the word dementia.

Sometimes they think, well, are you blaming me that I can't keep my memory going on? And dementia sort of a pejorative term. And I know that sometimes physicians in primary care, you're trying to keep your relationships with patients, and you might get a little uncomfortable by bringing up the word

dementia or trying to explain it to people. When you work with older adults, and you think they might have a dementia. How do you explain a dementia to that? What do you say a dementia is?

Speaker 3: Eukesh Ranjit, MD

That's a really good question, Raj. And dementia, you know, it does tend to have a very considered pejorative by some of our patient population. And it's a big diagnosis for almost all the patients who ever get diagnosed with dementia. For a working diagnosis, ya know dementia to our physician listeners who primarily serve in primary care, what I tell my colleagues is it's a permanent decline in cognition, which is a severe enough to affect activities of daily living.

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Speaker 3: Eukesh Ranjit, MD

A few things to unfold over here. First of all, it's a permanent condition. So, you know, things like delirium or if the patient has some medications which are affecting their cognition, they do not qualify as dementia. And, you know, we could take care of those conditions separately. As a decline in generally one or more domains of cognition. So, we have to assess those different domains of cognition as we assess the patient, and it should be severe enough to affect their daily living, basically.

Sometimes we do tend to get carried away and there is a, for example, patients who are not highly educated and patients who have language barrier. If we do a standardized test like a MoCA or MMSE on them, they might score lower. But sometimes it might just be because of their level of understanding or the level of education, or sometimes even the fact that English is not their primary language, you know?

So, we have to ensure that there is some decline in activities of daily living when we're talking about dementia. When it comes to patients, I tend to basically talk to them and say that this is a problem, this is a problem with their memory. It is known to you but is a problem with their memory. And very likely it is going to get worse as it progresses, as the time progresses. And we have to take care of this. What we call it is not important whether we call it dementia or something else is not important. But we need to take care of you, and we need to make sure that you have a good quality of life moving forward. And we do things that help you, you know, improve their quality of life as we move forward.

That's an approach that I take in my personal practice.

Speaker 2: Raj Shah, MD

Yeah, no, and I think you brought up a good point because sometimes we get really like in medical school, they make it maybe more technical than it needed to be about what a dementia is. And I think bringing it out to some of these components or qualities, that's a chronic thinking problem that affects a person's day to day life.

So chronic, it's lasting a long time. So, it's not something transient, as you mentioned. It's a thinking problem, something that's affecting how we process information in the world and it's affecting our lives,

right. Like it's causing us not to socialize as much or not to do our work as much or our hobbies or our day-to-day activities.

And I hope that sometimes just demystifies that for people, especially even in primary care, in making that diagnosis or that explanation, if we can just say, you know, dementia is a chronic thinking problem that affects your day-to-day life, I think it just makes it easier for people. It almost becomes like how we use anemia to say that that means a low blood count and it just makes it a bit easier to start the conversation with dementia as the syndrome, right? The signs and symptoms that are causing people to have these difficulties. Absolutely.

Speaker 3: Eukesh Ranjit, MD

I couldn't have said it better. Would you mind if I stole your line, though?

Speaker 2: Raj Shah, MD

Well, yeah, please. Definitely. If that helps people use it. That's what this entire series is about. And the discussion is, is that people can share simple things that help us. But I do know that sometimes people will ask a little bit more, right? Like, what is the cause of this chronic thinking problem that's affecting my day-to-day life?

And, you know, they hear terms like Alzheimer's disease. They hear terms like Lewy body disease. How do you try to explain the difference between dementia as a chronic thinking problem and then the potential things that cause the dementia and what are some of the most common maybe we start there. What are some of the more common causes you see in your practice that might be driving why somebody might be showing a dementia?

Speaker 3: Eukesh Ranjit, MD

Absolutely. That's a that's a great question and that this is a question that I get asked often by both patients as well as other providers. Always the terms dementia and Alzheimer's are used interchangeably and oftentimes patients are confused with this and they have a lot of queries with regards to this. So, dementia is an umbrella term and, you know, there are various things that can cause dementia.

Some of the most common causes of dementia are Alzheimer’s disease, vascular dementia, frontotemporal dementia, Lewy body dementia and dementia associated with Parkinson's disease and other minor causes. By far the most common cause of dementia, if you take a single cause into consideration, is Alzheimer's. And for that reason, dementia and Alzheimer's are often taken interchangeably. But if you look at multiple causes, like, you know, if a patient like a number of patients with Alzheimer's, they do tend to have some elements of vascular dementia associated with them as well.

If you take that into consideration, the most common cause of dementia is actually mixed dementia. So, they have a combination of Alzheimer's, vascular and sometimes a number of other causes. We have always been trained from med school in order to learn about the different kinds of dementia and basically their manifestations. So, Alzheimer's tend to manifest more in older patients basically as short-term memory is affected first, the long-term memory is affected.

And since we have a family history of dementia, vascular tends to happen in patients. We've had a history of sort of vascular accident or who have vascular and some kind of history of diabetes, hypertension, hyperlipidemia, smoking, they tend to develop vascular dementia much. And one of the great things about vascular dementia is actually the fact that because primary care providers are doing such a great job at controlling smoking, you know, they're actually doing a great job at controlling blood pressure, blood glucose and blood cholesterol. The incidence of vascular dementia is actually not rising as much. And for a while it was actually decreasing. I don't know what the latest numbers are, but it was actually declining. Great job primary care physicians - were we're doing a great job with regards to this. Then things like frontotemporal dementia, which tend to basically cause a disinhibition and patients tend to have a loss of social grace, they tend to be more impulsive, gamble Those things are often manifested in front of temporal dementia.

Then dementia associated with Parkinsonism as well as Lewy body. It tends to be a spectrum where, you know, if you have dementia or change in memory associated with movement disorders early on, it's more likely to be underreported. Dementia. However, you know, if there is a tremor, rigidity and really kind of associated memory loss later on, it tends to be more Parkinson's and associated with Parkinson's.

And so, this is something that we learned in our textbook. And, you know, we do learn about it in all CMEs about dementia. Practically, though, for family physicians, we tend to see more of Alzheimer's and vascular dementia and combination, the mixed combination most often, and those are the things where if we focus more as a primary care providers think we can help to serve the majority of patients who come in with the diagnosis of dementia. or who might, you know, develop a diagnosis of dementia after we see them.

That's a long-winded answer to a short question.

Speaker 2: Raj Shah, MD

Yeah, no, no, it doesn't. But I do think getting across the point that, you know, there's over 100 different causes of dementia, but in reality, what we see in our day-to-day practice, there's usually a few that are the drivers. Mixed dementia being the combination of more than two causes. Usually those two causes are vascular or with Alzheimer's disease by itself.

Alzheimer's disease probably being the biggest cause, then followed by Vascular and Lewy body. So just important that we, you know, as we triage all these cases and think about all the potential zebras that in the majority of the time it's the horse, and the horse is usually going to be mixed dementia, Alzheimer's disease or vascular dementia - is probably the important features that we want to get across today.

So, thank you for answering the questions around dementia and then the causes of dementia. So, you know, being able to say, Eukesh, that we've diagnosed a dementia and then we're asking what is the cause as and mix dementia and Alzheimer's disease , is it vascular and what that could happen. But is there a possibility that people could have something like Alzheimer's disease without having a dementia?

Speaker 3: Eukesh Ranjit, MD

That is a really great question. Or has we always tend to use dementia and the term Alzheimer's as an interchangeable term, basically, and like we just talked about it just a while ago, Alzheimer's is a cause of dementia. However, if you look at the physiology of Alzheimer's, dementia tends to develop after a long time after someone develops Alzheimer's.

So, there is a physiology changes that happen initially. And when those changes keep on accumulating over a long time period, it ends with the patient developing dementia. So theoretically, yes, it's possible to have Alzheimer's disease without having dementia. However, we do not have a very great clinical tools available to diagnose Alzheimer's prior to development of dementia, not in the realm of primary care at least that there might be some very big tertiary centers which might have some tools that have some degree of sensitivity and specificity to detect Alzheimer's early on.

But in primary care, we do not have those tools. And as of now, our primary focus is focused on basically detecting dementia. And after detecting dementia, detecting the type of dementia. There is one of the reasons why actually knowing the type of dementia is important is because, like I said previously as well, there are so many things that we can do as primary care physicians and just basically, you know, having the patient develop a lifestyle for the patient, you know, cutting down on sugar, making sure that the blood pressure is controlled by making sure that their cholesterol is controlled and also healthy diet and exercise does tend to have an effect.

And we know we do know that Alzheimer's tends to run in families. And, you know, an early detection would be something that we could be geared more towards if someone has a family history of Alzheimer's.

Speaker 2: Raj Shah, MD

Yeah. And so, I think the key point there is that we can have Alzheimer's disease for a years before those changes in the brain, the protein changes that are happening with misfolding of amyloid and tangles caused by tau misfolding within the neurons or brain cells themselves. That is how we define Alzheimer's disease. That can happen for decades before somebody develops the symptoms that eventually become the chronic thinking problems that affect somebody's day to day life.

But in reality, we don't have those medications or treatments for people at that stage right now. So, focusing our efforts in diagnosing the dementia, that chronic thinking problems that affect day to day life and then try to understand what might be the cause for that is probably where we can best use our skills and talents at this moment.

The one thing I have seen that maybe comes up once in a while is somebody will get a brain scan for another reason, like somebody fell and the report will come back from the radiologist that has shrinkage of the brain and the temporal parietal areas may be consistent with Alzheimer's disease. And I would just caution, right, like if you get something like that in a report to not just say the person has Alzheimer's disease or a dementia due to Alzheimer's disease, because you really have to find out if they have chronic thinking problems that are affecting their day-to-day life.

Have you seen that type of report or how to deal with that when a patient's seen something that comes up on their brain scan and says consistent with Alzheimer's disease?

Speaker 3: Eukesh Ranjit, MD

Absolutely. That that does tend to happen at times. And also, not just add, even if the report says that there's a mild to moderate, you know, change in the brain volume shrinkage in the brain volume, patients tend to be very worried about that. So one of the things that we have to really focus on is that dementia is not diagnosed just based on the scan, it's not diagnosed just based on the screening tool.

It's accumulation of all the factors that goes into consideration. The scan does tend to verify and show us patterns of changes in the brain that which would be more suggestive of Alzheimer's versus vascular or something else. But that by itself is not a diagnosis of dementia. And whenever these things do happen, I do talk to the patients, but it's always in the back of my mind that, you know, it could be an early development of Alzheimer's without dementia.

And I do tend to see those patients on a regular basis and, you know, screen them for possibility of developing dementia down the line.

Speaker 2: Raj Shah, MD

So, I'd really appreciate the time you've taken with us today. You have to go over what is dementia and how do we explain it and what it means, and then also how the common causes fit with dementia. I know we're going to have a lot more to explore in understanding these concepts and helping in our docs diagnose dementia better in the state of Illinois.

I was wondering if I could ask a favor of you, which is I've got to go to a lot of different places around the state and talk to different physicians that are doing some excellent work in this space. Now, I was wondering if we could buddy up and you could do some of those visits and I will do some in the series so that we'll get different perspectives from throughout the state.

Are you up for it? do you want to be part of this experience?

Speaker 3: Eukesh Ranjit, MD

Absolutely. I would love to do that. I love traveling. I love grabbing coffee and random spots and I love your show. So, it would be a privilege to join you.

Speaker 2: Raj Shah, MD

Oh, that'd be great. And hopefully we could get even more people to join us as we do this along the way, because it's just going to be hard. And I don't know if I could drink that much coffee that fast, but I really appreciate the opportunity to spend some time in Springfield today at SIU Center for Family Medicine and the excellent work that's going on there every day to work with people and understand dementia.

And I'm sure we'll be talking more in the future. But I really appreciate that time. And as I'm heading out, you know, where do you suggest I stop by to pick up a cup of coffee or tea on my way out?

Speaker 3: Eukesh Ranjit, MD

There are a number of really nice places over here. You could try grab a Java. I would recommend Grab a Java.

Speaker 2: Raj Shah, MD

Is that okay? Yes. Look. Cool. So, I'll give that a try on my way out of the city today as we go on to our next adventures. But again, I wanted to thank Doctor UK Sharon Jet for spending some time with us in our podcast today and in our next podcast we'll continue to go around to visit people and talk a little bit more about how we approach early detection and diagnosis.

And again, I put out the offer for anybody that if you have if you are or if you know somebody as a family physician who's doing excellent work around making their communities more dementia friendly and supporting their patients, that might be at risk or living with dementia, please reach out to me at Raj_C_shah@rush.eduand we'll try to bring them on the podcast so we can learn together.

Hope everybody has a good day, and we'll talk to you soon.

Speaker 1: Kate Rowland, MD

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