Transcript Details

This is a transcript of a continuing medical education (CME) activity. Additional media formats for the activity and full activity details (including sponsor and supporter, disclosures, and instructions for claiming credit) are available by visiting:
https://reachmd.com/programs/cme/pah-clinical-consult-getting-to-the-heart-of-pah/15504/

Time needed to complete: 15 minutes

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

PAH Clinical Consult: Getting to the Heart of PAH

Announcer:
Welcome to CME on ReachMD. This activity, titled “PAH Clinical Consult: Getting to the Heart of PAH” is provided by Prova Education.

Prior to beginning the activity, please be sure to review the faculty and commercial support disclosure statements as well as the learning objectives.

Dr. McLaughlin:
Delayed evaluation and diagnosis of pulmonary arterial hypertension, or PAH, worsens quality of life and outcomes for our patients. How can we as providers change our assessment, diagnosis and treatment strategies, and implement better communication approaches with patients and care partners? Today, we'll get into the heart of the matter in PAH.

This is CME on ReachMD, and I'm Dr. Vallerie McLaughlin.

Dr. Saggar:
And I'm Dr. Rajan Saggar. Let's approach this topic by first discussing guideline recommended strategies for the early diagnosis of PAH.

Val, why do we as providers need to change how we assess for PAH? And how should our initial assessment inform our treatment plan?

Dr. McLaughlin:
Despite all the advances that we've made over the past couple of decades in treatment, we're really not getting to our patients any earlier; it's still a year or 2 between the onset of symptoms and the actual diagnosis. So we really should be doing a better job identifying patients earlier. It's a challenge, right, because the symptoms of pulmonary hypertension are nonspecific; they’re shortness of breath or fatigue. And of course, the differential diagnosis for that is very broad. Of course, there are some special populations such as those with scleroderma or a family history or portal hypertension, where we should have the suspicion for PAH earlier, and even some of those patients we should screen, such as the scleroderma patients, before symptoms.

But really, the evaluation culminates in the right heart catheterization, which is absolutely required to make the diagnosis of pulmonary arterial hypertension or to determine another cause of pulmonary hypertension. And I think another point that's really important about that initial diagnosis is that it really is the first point of risk assessment. That initial diagnosis is very thorough, gives us all of the markers that we use to calculate risk scores and assess prognosis. And of course, that's really important in terms of our first treatment decision.

Dr. Saggar:
And I guess one of the things that may be important to sort of discuss is perhaps some of the markers or some of the variables we use in the risk assessment.

Dr. McLaughlin:
So there's a number of different risk assessment tools, and the prognostic indicators, there's a tremendous amount of overlap between all of those tools. So as crude as it is, functional class is very prognostic. And it's included in all the tools, and so is 6-minute hall walk. Again, that's relatively a crude measure of exercise tolerance, but it's very prognostic. Biomarkers, BNP or NT-proBNP, are really critical

as well. And the hemodynamics that are most important in terms of predicting outcome really have nothing to do with the pulmonary artery pressure, but everything to do with the function of the right ventricle. So right atrial pressure, cardiac index, SvO2, stroke volume index are all important prognostic indicators.

Raj, let's talk about the current treatment approach to PAH and how the clinical trial data has really been put into practice.

Dr. Saggar:
I think the buzzwords to really remember when we're talking about treatment of a PAH patient is really the idea of upfront combination therapy. Back in the day, when these therapies were rolling out, we often treated patients with monotherapy up front. And by that we mean that we would start one drug and sequentially introduce a second or third drug, depending on the response to the first agent. And while there are certainly patients who can benefit from monotherapy and have sustained benefits, for the patients who have intermediate and high-risk profiles, we prefer to introduce combination therapy. And the 2 drugs that we tend to combine based on randomized controlled trial data are really an endothelin receptor antagonist and a phosphodiesterase 5 inhibitor. And those 2 drugs used specifically in the index study which brought up-front combination therapy to the forefront was the so-called AMBITION study. And the 2 drugs used there were tadalafil as the phosphodiesterase 5 inhibitor and ambrisentan as the endothelin receptor antagonist. And that's really revolutionized our approach and really improved the outcomes of our patients in terms of morbidity and mortality.

Val, you are obviously very familiar with the TRITON study, which really took that concept a step further and asked the question, well, if 2 drugs is better than 1 up front, then perhaps 3 drugs may be better than 2 up front. Would you like to comment on what we saw with the Triton study?

Dr. McLaughlin:
Yeah, sure, Raj. So it was just exactly as you said, you know, 3 versus 2 oral therapy, so macitentan, tadalafil, and selexipag, which is a prostacyclin receptor agonist versus macitentan, tadalafil, and placebo. And it was a small study looking at pulmonary vascular resistance as the primary endpoint. And what we found was that there was no difference between the 2 groups, 3 drugs versus 2 drugs. But what was really remarkable was the reduction in pulmonary vascular resistance, about 50% reduction in pulmonary vascular resistance in both groups and about a 50-meter improvement in hall walk in both groups. And so while the study was neutral, it certainly did reinforce the concept of up-front combination therapy with ERA.

Dr. Saggar:
Certainly one of the things that we all start to think about as providers, and certainly patients will think about, when we start adding more and more medications, is the idea of compliance. Luckily, in the pulmonary arterial hypertension world, we've been lucky enough to have drugs that are once a day. However, even with once-a-day dosing, or twice-a-day dosing in some cases, there is a pill burden, there's a compliance issue, there's obviously cost issues. And insurance companies, of course, play a role in all of this. And one of the things that is being looked at now to sort of tackle some of this is the idea of a fixed-dose combination therapy, combining macitentan with 2 different doses of tadalafil. So 2 different formulations of a combination pill to hopefully improve compliance and pill burden. And I think, compliance is always better when you're dosing no more than once a day.

With that in mind, you know, one of the things we have to figure out is exactly who gets what. And we refer back to the guidelines, as Val mentioned, from the 2022 ERS/ESC guidelines that really have a treatment algorithm outlined. And it really focuses on providing therapy and PAH-specific treatments based on risk assessment and also based on cardiac comorbidities. Cardiac comorbidities have become or have been a part of the PAH world for some time in the sense that the average median age of a PAH patient as we sit here today is around 60 years of age, very different than the young female PAH patient that was first being treated.

Dr. McLaughlin:
I think, in reality, when we see patients, we have to distinguish between this more cardiac phenotype or even a pulmonary phenotype from the Group 1 PAH, realizing that some comorbidities are common. And so there may be a 40-year-old patient with what is really true Group 1 PAH, who just happens to have systemic hypertension, and that patient still gets treated aggressively like PAH, as opposed to perhaps the elderly patient who has multiple comorbidities and a very modestly elevated PVR [pulmonary vascular resistance]. It's that sort of patient that we would really take a more 1-drug-at-a-time approach, as suggested by the ESC/ERS guidelines.

Dr. Saggar:
I think some of the main take-home messages for the treatment algorithm for PAH with or without cardiac comorbidities, if you have a low-risk patient, you may consider monotherapy. If you have an intermediate-risk patient, and we do break up the intermediate group into a low and high intermediate risk, but the bottom line is in both those subpopulations of the intermediate-risk group, we recommend up-front combination therapy. And for the high-risk patient, we recommend up-front 3-drug regimen, which includes the combination that we discussed before with the phosphodiesterase 5 inhibitor and the endothelin receptor antagonist, but we will also add in, for that high-

risk patient, some form of a prostacyclin, either intravenous or subcutaneous delivery. So there is a general treatment algorithm that we follow based on risk assessment.

So I don't know, Val, if you have anything to add to that.

Dr. McLaughlin:
The only other thing I would add is that's just the first step, right? That's what we do at the time of diagnosis. But I think probably even the more important part of the algorithm is the next step, is bringing them back after 3 or 4 months and reassessing their risk. And if we haven't gotten them to the low-risk status, then we need to do something different, we need to add a third agent if we started 2, or we need to go from a less invasive prostanoid to a more invasive prostanoid, the whole treatment algorithm is predicated on continuous risk assessment and trying to escalate therapy and get that patient to a low-risk status.

For those just tuning in, you're listening to CME on reach MD. I'm Dr. Vallerie McLaughlin, and I'm here today with Dr. Rajan Saggar. We're getting to the heart of the matter of PAH by discussing its evaluation, diagnosis, and treatment, as well as best practices for patient communication and engagement.

Dr. Saggar:
Let's change topics. I think, as we know, PAH is a chronic disease. And while there's no cure, there are, as we've mentioned, several available therapies. And as providers, we have to work with patients and their care teams, which can be full of other providers in different aspects of the care of these patients, to establish a new normal.

Val, can you share your best practices as to how we can best accomplish this?

Dr. McLaughlin:
Yeah, this is a complex question. And we say it takes a village, right? It takes a village to take care of PAH patients because there are so many people involved. I think from the onset, we really have to do a great job educating the patient. And I can't emphasize enough the importance of shared decision-making and engaging the patient and their caregiver in that conversation about treatment.

And as we talk about these therapies, I always try to explain to patients that we have goals, right? We have short-term goals. The patient's short-term goal is: I want to feel better; I want to be able to go up the stairs; I want to be able to play with my kids; I want to be able to make it through the grocery store without having to stop twice. So, you know, that's the patient's goal. But we also have long-term goals. We know that this is a devastating disease with a high mortality rate. And one of the longer-term goals is to reduce the disease progression and improve survival. And so we have to balance those goals and balance the improvements in symptoms with the side effects of the medications. And that's a dance that we walk with our patients as we adjust their medications during that first course of therapy.

And, you know, Raj, taking care of these patients is really a team effort. In addition to our nursing staff who is so critical, we rely a lot on other healthcare providers, the physical therapist and the exercise physiologists who are so critical in terms of exercise and rehabilitation and trying to get patients back to higher-functioning levels. We refer our patients to dieticians and nutritionists for sodium restriction and really just generally healthy lifestyle. I think it's really important to also involve the caregiver and, you know, that puts a lot of stress on them. So engaging with them providing the psychosocial and spiritual support. A number of patient associations have support groups that are really helpful for both the patient and the caregiver. And sometimes we get to the point where we've done all we can, perhaps the patient is not a candidate for transplantation, and when that time comes, it's really important to approach palliative care and engage our palliative care specialists to really go through the options that the patient has at that point in the disease.

And then I think there's other technology that we can engage. For example, for education, there are a number of patient education videos that can complement what we tell the patients in clinic, because remember, they're not going to retain everything that we tell them. So having these other tools for education are really important.

Dr. Saggar:
Well, you know, Val, I've been very impressed, actually, with the educational videos for patients. This interfaces directly with the electronic medical record that you may have at your facility. And what I've been impressed with is the idea that you can actually prescribe these videos to patients, much like you would do a medication. But these videos can be prescribed and a lot of times will end up in their after-visit summary. So I think it's been super helpful, and I think patients have benefited from it as well.

Dr. McLaughlin:
Yeah, I think that's great. And then the link just shows up on their after-visit summary. And they can watch it as many times as they want or need to be able to absorb it.

Well, this has certainly been an excellent conversation, but before we wrap up, Raj, can you share 1 take-home point with our audience?

Dr. Saggar:
Patients with pulmonary arterial hypertension present with symptoms that are often not discernible for multiple other lung and/or heart conditions. That index of suspicion has to be very high when you're thinking about your differential diagnosis, for instance, dyspnea on exertion or exertional atypical chest pain or these types of symptoms that we all see so often in our emergency rooms, urgent cares, and clinics. So keep PAH in your differential diagnosis would be my take home message, and hopefully we can cut into some of the delay in the diagnosis that we still experience today.

Dr. McLaughlin:
And my main message for treatment is about the importance of risk assessment, using an objective risk assessment tool and assessing your patient's risk at baseline, at that first follow-up, and then really using that to guide therapy. I think that's really a critical part of the treatment of patients with PAH.

Well, unfortunately, that's all the time we have today. So I want to thank our audience for listening and thank you, Raj, for joining me and for sharing all of your valuable insights. This was really a great discussion today, and I enjoyed speaking with you.

Dr. Saggar:
Thank you, Val, and goodbye.

Announcer:
You have been listening to CME on ReachMD. This activity is provided by Prova Education.

To receive your free CME credit, or to download this activity, go to ReachMD.com/Prova. Thank you for listening.